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ANNUAL REPORTS

OF THE

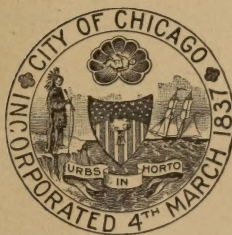
VARIOUS DEPARTMENTS

OF THE

CITY OF CHICAGO

FOR THE

Fiscal Year Ending December 31, 1896.



CHICAGO:

CAMERON, AMBERG & CO., PRINTERS.

1897

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Section I.

DEPARTMENT OF FINANCE.

FORTIETH

ANNUAL STATEMENT

OF THE

Finances of the City of Chicago

From January 1, 1896, to December 31, 1896.



CHICAGO:
THE J. M. W. JONES STATIONERY AND PRINTING CO.
1897.

LIST OF CITY OFFICERS.

Fiscal Year January 1, 1896, to January 1, 1897.

| | | | | | |
|----------------------|---|--|---|---|------------------------------|
| GEORGE B. SWIFT, | . | . | . | . | <i>Mayor</i> |
| O. D. WETHERELL, | . | . | . | . | <i>City Comptroller</i> |
| ADAM WOLF, | . | . | . | . | <i>City Treasurer</i> |
| J. R. B. VAN CLEAVE, | . | . | . | . | <i>City Clerk</i> |
| W. D. KENT, | { | . <i>Commissioners of Public Works</i> | | | |
| JOSEPH DOWNEY, | | | | | |
| L. B. JACKSON, | . | . | . | . | <i>City Engineer</i> |
| WM. G. BEALE, | . | . | . | . | <i>Corporation Counsel</i> |
| ROY O. WEST, | . | . | . | . | <i>City Attorney</i> |
| WM. TATGE, | . | . | . | . | <i>Prosecuting Attorney</i> |
| JOHN J. BADENOCH, | . | . | . | . | <i>Gen'l Sup't of Police</i> |
| DENIS J. SWENIE, | . | . | . | . | <i>Fire Marshal</i> |

| | | | |
|--------------------------|---|---|---------------------------------------|
| JOHN P. BARRETT, | . | . | <i>Sup't City Telegraph</i> |
| A. C. COTTON, | . | . | <i>City Physician</i> |
| WM. R. KERR, | . | . | <i>Commissioner of Health</i> |
| PHILLIP MAAS, | . | . | <i>City Collector</i> |
| JOSEPH DOWNEY, | { | . | <i>Sup'ts of Buildings</i> |
| T. O'SHEA, <i>Acting</i> | | | |
| H. J. JONES, | . | . | <i>Sup't Special Assessments</i> |
| F. M. BARRETT, | . | . | <i>Secretary of Finance Committee</i> |
| LOUIS S. HAYES, | . | . | <i>General Accountant</i> |

CITY COUNCIL.

FIRST WARD.

Francis P. Gleason John J. Coughlin

SECOND WARD.

Martin Best Charles F. Gunther

THIRD WARD.

Noble B. Judah Henry S. Fitch

FOURTH WARD.

M. B. Madden William S. Jackson

FIFTH WARD.

William J. Doerr William E. Kent

SIXTH WARD.

Henry Stuckart Charles Martin

SEVENTH WARD.

Edward Haas Nathan T. Brenner

EIGHTH WARD.

John Bennett Frank Meek

NINTH WARD.

Jos. E. Bidwill Vaclav Klenha

TENTH WARD.

Anton Novak August W. Miller

ELEVENTH WARD.

Charles E. Hambleton . . . Frank F. Gazzolo

TWELFTH WARD.

James L. Campbell . . . Conrad Kahler

THIRTEENTH WARD.

Charles F. Holman . . . William T. Maypole

FOURTEENTH WARD.

George A. Mugler . . . Albert W. Beilfuss

FIFTEENTH WARD.

Joseph F. Haas . . . John Anderson

SIXTEENTH WARD.

George C. Lenke . . . Peter Kiolbassa

SEVENTEENTH WARD.

Stephen P. Revere . . . Magnus C. Knudson

EIGHTEENTH WARD.

John J. Brennan . . . John A. Rogers

NINETEENTH WARD.

Thomas Gallagher . . . John Powers

TWENTIETH WARD.

John H. Hartwick . . . Charles M. Probst

TWENTY-FIRST WARD.

Frederick A. Hoyer . . . Nathan W. Plotke

TWENTY-SECOND WARD.

Adolphus W. Maltby . . . John Maynard Harlan

TWENTY-THIRD WARD.

John Weisbrod . . . Thomas J. O'Malley

TWENTY-FOURTH WARD.

William R. Manierre. . . Charles M. Walker

TWENTY-FIFTH WARD.

George B. Milne . . . August F. Portman

TWENTY-SIXTH WARD.

William Finkler . . . Wm. E. Schlake

TWENTY-SEVENTH WARD.

George S. Foster . . . Hubert W. Butler

TWENTY-EIGHTH WARD.

Thomas Sayle . . . Charles H. Rector

TWENTY-NINTH WARD.

James J. McCarthy . . . Robert Mulcahy

THIRTIETH WARD.

John W. Utesch . . . Ethan A. Mowrer

THIRTY-FIRST WARD.

Isaiah T. Greenacre . . . Clark T. Northrop

THIRTY-SECOND WARD.

William Kent . . . William Mavor

THIRTY-THIRD WARD.

George W. Shepherd . . . Cyrus H. Howell

THIRTY-FOURTH WARD.

John O'Neill . . . John B. Math

INSPECTORS, HOUSE OF CORRECTION.

GEORGE B. SWIFT, Mayor, - - - *Chairman*

*ERNST FECKER, JR., A. A. GOODRICH, WILLIAM

GARDNER, DR. A. LAGORIO.

MARK L. CRAWFORD, - - - *Superintendent.*

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| EDWARD S. DREYER, | SEVERT T. GUNDERSON, |
| JOHN B. HAMILTON. | |

| | | |
|----------------------|---------|------------------------|
| AZEL F. HATCH, | - - - - | <i>President.</i> |
| ROBERT S. McCORMICK, | - - - - | <i>Vice-President.</i> |
| WM. B. WICKERSHAM, | - - - - | <i>Secretary.</i> |
| FRED H. HILD, | - - - - | <i>Librarian.</i> |

BOARD OF EDUCATION.

| | |
|------------------------|-----------------------|
| DANIEL E. CAMERON | JOSEPH H. STRONG, |
| THOMAS BRENNAN, | LOUIS O. KOHTZ, |
| H. H. GROSS, | THOMAS CUSACK, |
| JOHN F. WOLFF, | ALFRED S. TRUDE, |
| EDWARD G. HALLE, | GEORGE E. ADAMS, |
| OSCAR M. TORRISON, | CLAYTON MARK. |
| FRED M. BLOUNT, | OTTO C. SCHNEIDER, |
| JOHN S. MILLER, | P. F. PETTIBONE, |
| JOSEPH W. ERRANT, | MRS. ELLA G. HULL, |
| WALLACE F. KIRK, | MRS. EVELYN A. FRAKE, |
| BENJAMIN J. ROSENTHAL. | |

| | | | | | |
|--------------------|---|---|---|---|-----------------------------|
| EDWARD G. HALLE, | - | - | - | - | <i>President.</i> |
| THOMAS CUSACK, | - | - | - | - | <i>Vice-President.</i> |
| ALBERT G. LANE, | - | - | - | - | <i>Superintendent.</i> |
| JOHN A. GUILFORD, | - | - | - | - | <i>Business Manager.</i> |
| DONALD L. MORRILL, | - | - | - | - | <i>Attorney.</i> |
| W. A. S. GRAHAM, | - | - | - | - | <i>Secretary and Clerk.</i> |
| THOMAS J. WATERS, | - | - | - | - | <i>Chief Engineer.</i> |
| GEORGE G. CUSTER, | - | - | - | - | <i>Auditor.</i> |

BOARD OF TRUSTEES OF THE POLICE PENSION FUND.

| | | | |
|------------------------------------|---|---|--|
| O. D. WETHERELL, City Comptroller, | - | - | <i>President.</i> |
| JOHN J. BADENOCH, | - | | <i>General Superintendent of Police.</i> |
| ADAM WOLF, | - | - | <i>Treasurer.</i> |
| J. R. B. VAN CLEAVE, City Clerk, | - | - | <i>Secretary.</i> |
| F. M. BARRETT, | - | - | <i>Clerk.</i> |

BOARD OF TRUSTEES OF THE FIREMEN'S PENSION FUND.

| | | | |
|------------------------------------|---|---|-----------------------|
| O. D. WETHERELL, City Comptroller, | - | - | <i>President</i> |
| D. J. SWENIE, | - | - | <i>Fire Marshal.</i> |
| ADAM WOLF, | - | - | <i>Treasurer.</i> |
| J. R. B. VAN CLEAVE, City Clerk, | - | - | <i>Secretary.</i> |
| ROY O. WEST, | - | - | <i>City Attorney.</i> |
| F. M. BARRETT, | - | - | <i>Clerk.</i> |

POLICE COURTS.

FIRST DISTRICT.

(Harrison Street and Pacific Avenue.)

Court No. 1—John Richardson, Judge ; E. S. Robinson, Clerk.

Court No. 2—G. W. Underwood, Judge ; T. B. Heller, Clerk.

SECOND DISTRICT.

(Corner Morgan and Maxwell Streets.)

Court No. 1—Max Eberhardt, Judge ; F. C. Souhrada, Clerk.

Court No. 2—J. C. Dooley, Judge ; Chas. H. Eis, Clerk.

THIRD DISTRICT.

(Desplaines Street and Waldo Place.)

Court No. 1—Q. J. Chott, Judge ; Albert Glade, Clerk.

Court No. 2—Miles Kehoe, Judge ; M. V. Hinshaw, Clerk.

FOURTH DISTRICT.

(West Chicago Avenue, near Milwaukee Avenue.)

Court No. 1—Olaf Severson, Judge ; H. G. Keats, Clerk.

Court No. 2—Jarvis Blume, Judge ; H. C. Anderson, Clerk.

FIFTH DISTRICT.

(East Chicago Avenue, near Clark Street.)

Court No. 1—George Kersten, Judge ; Henry Severin, Clerk.

SIXTH DISTRICT.

(Thirty-fifth Street, near Halsted Street.)

Court No. 1—W. T. Hall, Judge ; Henry Trimble, Clerk.

Court No. 2—E. T. Glennon and M. R. M. Wallace, Judges ; T. D. McFarland and Mathew Hagans, Clerks.

SEVENTH DISTRICT.

(Fifty-third Street, near Lake Avenue.)

Court No. 1—Gideon E. Clark and A. R. Porter, Judges ; C. A. Burnham, Clerk.

Court No. 2—N. T. Robbins, Judge ; B. S. Rozynek, Clerk.

EIGHTH DISTRICT.

(Halsted and Matteson Streets.)

Court No. 1—J. J. Hennessey, Judge ; C. O. Hawkins, Clerk.

NINTH DISTRICT.

(Wentworth Avenue, near Sixty-fourth Street.)

Court No. 1—Henry C. Schulte, Judge ; W. G. Bosworth, Clerk.

TENTH DISTRICT.

(Sheffield Avenue, near Diversey Street.)

Court No. 1—Henry Bonnefoi, Judge ; Walter Peters, Clerk.

COMPTROLLER'S REPORT
FOR THE YEAR 1896.

FINANCE DEPARTMENT.

The Finance Department of the City Government for 1896 was composed of

O. D. WETHERELL, - - - - - *City Comptroller.*

ADAM WOLF, - - - - - *City Treasurer.*

PHILLIP MAAS, - - - - - *City Collector.*

COMPTROLLER'S ANNUAL REPORT.

CITY OF CHICAGO,
DEPARTMENT OF FINANCE, }
March 25, 1897.

To the Honorable the Mayor and City Council:

GENTLEMEN—I submit herewith the City Comptroller's Fortieth Annual Statement of the finances of the City of Chicago. The salient features of the report are as follows, viz:

First. The permanent assets of the city, *i. e.*, buildings, real estate, water works, etc., at cost value amount to \$56,849,-412.41, having been increased during 1896 by purchases and improvements to the extent of \$3,555,155.36.

Second. The general or surplus fund, on December 31, 1896, amounted to \$2,429,754.55, the City having added \$70,663.25 to this account during the last year.

Third. The bonded debt was reduced \$110,000.00 during 1896, and now amounts to \$17,078,950.00.

Fourth. Outstanding judgments against the City on December 31, 1896, aggregated \$1,570,661.29. This is \$11,-451.42 less than the amount outstanding one year ago.

Fifth. Assets and liabilities of the City showing its true financial condition.

Sixth. Schedules showing assessed valuation, population, real and personal property, bonded debt, etc., etc.

Respectfully submitted,

O. D. WETHERELL,

Comptroller.

ABSTRACT

OF THE

Receipts of the City of Chicago

FOR THE

Fiscal Year Ended December 31, 1896.

| | |
|------------------------------|-----------------|
| Balance in the City Treasury | |
| December 31, 1895..... | \$ 1,891,301.92 |

RECEIPTS.

From:

| | |
|----------------------------------|------------|
| Board of Examining Engineers..\$ | 9,003.73 |
| Boiler Inspector..... | 7,193.96 |
| Building Department | 58,747.45 |
| Burr, Jonathan Fund..... | 1,979.36 |
| City Markets | 5,507.80 |
| City Sealer..... | 902.20 |
| Costs of Tax Sales..... | 66.83 |
| Department of Public Works .. | 161,196.77 |
| Fees... .. | 7,323.80 |
| Fire Department | 13,364 10 |
| Forfeited Bonds..... | 1,333.96 |
| General Fund..... | 68,852.34 |
| Harrison and Tree Fund..... | 123.80 |
| Health Department..... | 3,038.78 |
| House of Correction | 57,719.93 |
| Interest..... | 22.74 |
| Insurance Taxes | 23,117.18 |
| Judgments | 5,279.70 |
| Justices of the Peace..... | 1,740.00 |

| | | |
|----------------------------------|---------------|------------------------|
| Legal Expenses..... | \$ 805.98 | |
| Licenses | 3,572,819.75 | |
| Oil Inspector | 8,960.83 | |
| Police Department..... | 22,929.94 | |
| Police Court Fines..... | 67,948.54 | |
| Police Life and Health Ins. Fund | 1,520.00 | |
| Pounds | 5,048.33 | |
| Premium on Tax Sales..... | 455.92 | |
| Printing and Stationery | 2.05 | |
| Prosecuting Atty's Collections.. | 2,150.85 | |
| Public Library Department.... | 6,480.60 | |
| Rents..... | 40,437.43 | |
| Salaries | 235.00 | |
| School Fund Department..... | 4,199,627.30 | |
| School Tax Fund Department.. | 13,681.94 | |
| Sewerage Department | 152,984.99 | |
| Special Deposits..... | 10,566.75 | |
| Special Deposits Dept. P. W.. | 196,739.24 | |
| Special Assessments | 4,076,875.75 | |
| Special Fund "W" | 244,932.28 | |
| Street Lamp Department..... | 495,355.05 | |
| Suspense Account | 8,494.39 | |
| Tax Deeds, 1878 | 165.23 | |
| Taxes, 1895 | 13,834,025.73 | |
| Tax Loans, 1896..... | 1,028,987.73 | |
| Tax Purchases (Special)..... | 16,828.00 | |
| Water Fund..... | 3,531,793.79 | |
| Wharfing Interest..... | 1,377.06 | |
| Total Receipts..... | | \$31,968,744.88 |
| | | <u>\$33,860,046.80</u> |

ABSTRACT

OF THE

Expenditures of the City of Chicago

FOR THE

Fiscal Year Ended December 31, 1896.

Outstanding Accounts payable

December 31, 1895..... \$ 1,347,386.85

EXPENDITURES.

| | |
|----------------------------------|--------------|
| Building Department | \$ 46,633.59 |
| Board of Examining Engineers. | 7,221.51 |
| Burr Fund, Jonathan | 2,183.68 |
| City Cemetery | 94.25 |
| City Clerk | 18,109.71 |
| City Markets | 2,791.75 |
| Civil Service Commission | 31,399.84 |
| Contingent Fund. | 4,396.84 |
| Costs of Collecting City Taxes.. | 101,249.20 |
| Costs of Justices of the Peace.. | 2,514.35 |
| Department of Public Works .. | 1,926,979.64 |
| Election Expenses | 222,627.33 |
| Erring Woman's Refuge | 3,157.00 |
| Errors in Tax Warrants | 11.71 |
| Fire Department | 1,548,486.76 |
| General Fund | 319,517.89 |
| General Sinking Fund | 86,000.00 |
| Health Department | 178,360.18 |
| House of Correction | 118,088.53 |
| House of Good Shepherd | 3,157.00 |
| Illinois Humane Society | 85.00 |
| Insurance Tax (Refunded) | 126.07 |

| | | |
|-----------------------------------|----------------|------------------------|
| Interest | \$1,069,448.29 | |
| Judgments | 428,823.88 | |
| Jurors and Constables' Fees . . . | 4,357.05 | |
| Legal Expenses..... | 38,013.19 | |
| Oil Inspector's Expense..... | 8,254.80 | |
| Police Court Fines..... | 10,658.18 | |
| Police Courts..... | 2,912.45 | |
| Police Fund..... | 3,304,308.77 | |
| Police Life and Health Ins. Fund | 100.00 | |
| Pounds | 7,863.12 | |
| Printing and Stationery..... | 7,422.43 | |
| Public Library..... | 564,127.32 | |
| Rent Account..... | 1,287.31 | |
| Salaries..... | 222,692.47 | |
| School Fund..... | 3,934,412.29 | |
| School Tax Fund..... | 6,527,747.64 | |
| Sewerage Department..... | 338,970.18 | |
| Special Assessment Fund..... | 4,270,722.10 | |
| Special Deposit Fund..... | 32,117.88 | |
| Special Deposit Fund, Dept. P. W. | 220,272.10 | |
| Special Fund "W"..... | 244,924.94 | |
| Street Lamp Fund..... | 1,062,545.11 | |
| Suspense Account | 1,399.47 | |
| Tax Loans of 1895 | 871,092.69 | |
| Track Elevation Damages..... | 145.00 | |
| Water Department | 3,339,477.30 | |
| Total..... | | \$31,137,287.79 |
| | | <u>\$32,484,674.64</u> |
| Less Accounts Payable and Time | | |
| Warrants Outstanding Decem- | | |
| ber 31, 1896..... | | 2,243,729.97 |
| | | <u>\$30,240,944.67</u> |
| Balance in City Treasury Decem- | | |
| ber 31, 1896 | | 3,619,102.13 |
| | | <u>\$33,860,046.80</u> |

GENERAL STATEMENT.

| Board of Examining Engineers— | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account.</i> | |
|--|----------------------|------------------|------------------------------|---------------------|
| | | | <i>Dr.</i> | <i>Cr.</i> |
| From Board of Examining Engineers | | \$ 9,003 73 | | \$ 9,003 73 |
| For salaries, etc | \$ 7,221 51 | | \$ 7,221 51 | |
| Transferred to general fund.. | | | 1,782 22 | |
| | | | <u>\$ 9,003 73</u> | <u>\$ 9,003 73</u> |
| Boiler Inspector— | | | | |
| From Boiler Inspector J. D. Murphy | | \$ 7,193 96 | | \$ 7,193 96 |
| Transferred to general fund . | | | \$ 7,193 96 | |
| | | | <u>\$ 7,193 96</u> | <u>\$ 7,193 96</u> |
| Building Inspection Department— | | | | |
| From building permits | | \$ 43,943 45 | | |
| From elevator inspection,... | | 14,804 00 | | |
| For salaries of superintendent, inspectors, clerks and miscellaneous supplies..... | \$46,633 59 | | \$46,633 59 | |
| Transferred to general fund . | | | 12,113 86 | |
| | | | <u>\$58,747 45</u> | <u>\$ 58,747 45</u> |
| Burr, Jonathan Fund— | | | | |
| Balance to the credit of this fund Jan. 1, 1896..... | | | | \$ 407 24 |
| From interest on bonds, etc.. | | \$ 1,979 36 | | 1,979 36 |
| For miscellaneous bills audited by the Board of Education | \$ 2,183 68 | | \$ 2,183 68 | |
| Balance to the credit of this fund Dec. 31, 1896..... | | | 202 92 | |
| | | | <u>\$ 2,386 60</u> | <u>\$ 2,386 60</u> |
| City Markets— | | | | |
| From Johnson, market master..... | | \$ 5,507 80 | | \$ 5,507 80 |
| For salary of market master. | \$ 945 00 | | | |
| For cleaning, sprinkling, etc. | 1,846 75 | | | |
| | | | \$ 2,791 75 | |
| Transferred to general fund . | | | 2,716 05 | |
| | | | <u>\$ 5,507 80</u> | <u>\$ 5,507 80</u> |

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account.</i> | |
|---|----------------------|------------------|------------------------------|--------------------|
| | | | <i>Dr.</i> | <i>Cr.</i> |
| City Cemetery— | | | | |
| Appropriation March 2, 1896, from taxes 1896..... | | | | \$ 100 00 |
| For lots and interest..... | \$ 94 25 | | \$ 94 25 | |
| Transferred to general fund.. | | | 5 75 | |
| | | | <u>\$ 100 00</u> | <u>\$ 100 00</u> |
| City Clerk's Office— | | | | |
| Appropriation March 2, 1896, from taxes 1896..... | | | | \$15,000 00 |
| For license blanks, supplies, etc., printing council pro- ceedings, postage stamps, dog tags, etc..... | \$18,109 71 | | \$18,109 71 | |
| Transferred from general fund..... | | | | \$ 3,109 71 |
| | | | <u>\$18,109 71</u> | <u>\$18,109 71</u> |
| City Sealer— | | | | |
| From J. Dorsey Patton, city sealer | | \$902 20 | | \$ 902 20 |
| Transferred to general fund . | | | \$ 902 20 | |
| | | | <u>\$ 902 20</u> | <u>\$ 902 20</u> |
| Civil Service Commission— | | | | |
| Appropriation March 2, 1896, from taxes of 1896..... | | | | \$25,000 00 |
| Appropriat'n additional from general fund Nov. 30, 1896. | | | | 6,000 00 |
| For salaries and services..... | \$27,121 80 | | | |
| For sundry supplies and ex- penses | 4,278 04 | | | |
| | <u>4,278 04</u> | | \$31,399 84 | |
| Transferred from general fund Dec. 31, 1896..... | | | | \$ 399 84 |
| | | | <u>\$ 31,399 84</u> | <u>\$31,399 84</u> |
| Contingent Fund— | | | | |
| Appropriation March 2, 1896, from taxes of 1896..... | | | | \$ 8,000 00 |
| Paid the following contingent expenses : | | | | |
| For salaries of paymaster and assistant | \$ 2,320 00 | | | |
| For postage, mayor and comp- troller | 560 00 | | | |

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account.</i> | |
|--|----------------------|------------------|------------------------------|---------------------|
| | | | <i>Dr.</i> | <i>Cr.</i> |
| For extra services, comptroller's office | \$ 100 00 | | | |
| For sundry repairs, comptroller's office..... | 11 95 | | | |
| For items in Madden and Leonard case | 10 50 | | | |
| For constable and expert, Madden and L. case | 125 00 | | | |
| For newspapers..... | 84 26 | | | |
| For protective safe service... | 110 00 | | | |
| For redemption property sold in error..... | 1 82 | | | |
| For cleaning office carpet.... | 6 40 | | | |
| For city directory | 30 00 | | | |
| For telephone service..... | 202 50 | | | |
| For repairing office clock | 5 00 | | | |
| For electric gate lock..... | 12 08 | | | |
| For rugs in mayor's office ... | 19 00 | | | |
| For desk and chairs, comptroller..... | 57 75 | | | |
| For repairing fence, Gage farm..... | 11 07 | | | |
| For supplies for city collector | 280 28 | | | |
| For miscellaneous expenses paid by paymaster..... | 449 23 | | | |
| | | | \$ 4,396 84 | |
| Transferred to general fund . | | | 3,603 16 | |
| | | | <u>\$ 8,000 00</u> | <u>\$ 8,000 00</u> |
| Costs of Collecting City Taxes— | | | | |
| Appropriation March 2, 1896, from taxes of 1896..... | | | | \$211,006 09 |
| For loss in collection and expenses in collecting city taxes of 1895 and prior.... | \$101,249 20 | | \$101,249 20 | |
| Transferred to general fund.. | | | 109,756 89 | |
| | | | <u>\$211,006 29</u> | <u>\$211,006 29</u> |
| Costs of Justices of the Peace— | | | | |
| For costs payable to justices of the peace | \$ 2,514 35 | | \$ 2,514 35 | |
| Transferred from general fund | | | | \$ 2,514 35 |
| | | | <u>\$ 2,514 35</u> | <u>\$ 2,514 35</u> |

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account.</i> <i>Dr. Cr.</i> |
|---|----------------------|------------------|--|
| Costs of Tax Sales— | | | |
| From redemptions of city tax purchases | | \$ 66 83 | \$66 83 |
| Transferred to general fund.. | | | \$66 83 |
| | | | <hr/> |
| | | | \$66 83 |
| | | | <hr/> |
| Department of Public Works— | | | |
| Balance to the credit of this fund, January 1, 1896 | | | \$32,438 17 |
| Appropriation March 2, 1896, from taxes 1896 | | | 964,631 93 |
| Appropriation March 2, 1896, from general fund..... | | | 625,585 00 |
| Additional appropriation May 18, 1896, from general fund. | | | 25,000 00 |
| From cashier of Department of Public Works | \$158,196 77 | | |
| From No. Chicago City Ry. Co. | 3,000 00 | | 161,196 77 |
| Transferred from Health Department for isolation hospital and bath house..... | | | 69,252 05 |
| Expended for improved streets | \$196,262 24 | | |
| Street and alley cleaning..... | 662,223 28 | | |
| Unimproved streets..... | 125,320 35 | | |
| Sidewalks and intersections.. | 70,518 48 | | |
| Canal pump works..... | 72,255 05 | | |
| Chicago harbor salaries | 7,677 40 | | |
| Removing rock west fork of south branch..... | 15,000 00 | | |
| Dock work..... | 3,515 73 | | |
| Dredging | 4,898 85 | | |
| Bridge repairs | 131,014 53 | | |
| New bath house | 6,550 22 | | |
| Fullerton avenue bridge | 741 22 | | |
| Stock yards viaduct..... | 4,973 40 | | |
| Diversey street bridge | 31,246 73 | | |
| Van Buren street bridge | 326 20 | | |
| Fullerton avenue bridge | 12,671 66 | | |
| Bridge tenders salaries..... | 88,415 00 | | |
| Public buildings | 34,228 91 | | |
| Improving La Salle street.... | 1,033 23 | | |
| Janitors salaries | 47,517 65 | | |
| Public parks | 12,778 68 | | |
| Bridgeport lock | 2,600 00 | | |

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account.</i> | |
|---|----------------------|------------------|------------------------------|----------------|
| | | | <i>Dr.</i> | <i>Cr.</i> |
| Street Department salaries .. | \$15,354 51 | | | |
| Map Department salaries | 14,940 00 | | | |
| City engineer's office, salaries | 12,117 61 | | | |
| Commissioner's office, salaries | 14,182 74 | | | |
| Steam roller engineers, salaries | 2,724 76 | | | |
| Street openings & obstructions | 6,980 34 | | | |
| Street Dept., office expense... | 771 12 | | | |
| Map Dept., office expense.. | 323 73 | | | |
| City engineer's office expense. | 453 65 | | | |
| Proportional office expense... | 269 11 | | | |
| Const'r'n of isolat'n hospital | 90,080 03 | | | |
| Deposits for inspection..... | 4,020 00 | | | |
| Public benefits..... | 391 22 | | | |
| Street privileges | 5,062 07 | | | |
| Street permits | 38,579 16 | | | |
| Street lamp repairs..... | 52,712 90 | | | |
| House moving permits..... | 1,567 00 | | | |
| Vessel dispatchers, salaries .. | 2,250 00 | | | |
| Bridge telephone, salaries.... | 6,038 65 | | | |
| North Halsted street bridge.. | 112,074 40 | | | |
| Unpaid pay rolls of 1895..... | 14,317 83 | | | |
| | | | \$1,926,979 64 | |
| Transferred from general fund | | | | \$ 48,875 72 |
| | | | \$1,926,979 64 | \$1,926,979 64 |
| Election Expenses— | | | | |
| Appropriation March 2, 1896, from taxes 1896 | | | | \$ 125,000 00 |
| For payment of judges and clerks of election, rent of polling places and other ex- penses appertaining thereto | \$222,627 33 | | \$ 222,627 33 | |
| Transferred from general fund | | | | \$ 97,627 33 |
| | | | \$ 222,627 33 | \$ 222,627 33 |
| Erring Woman's Refuge. | | | | |
| From one-half the fines col- lected by the city for viola- tion of Section 5, Chapter 25, Revised Ordinances, trans- ferred from the general fund | | | | \$ 3,157 00 |
| Paid to erring woman's refuge | \$ 3,157 00 | | \$ 3,157 00 | |
| | | | \$ 3,157 00 | \$ 3,157 00 |

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account.</i> | |
|---|----------------------|------------------|------------------------------|--------------|
| | | | <i>Dr.</i> | <i>Cr.</i> |
| Errors in Tax Warrants— | | | | |
| Charged to this account and credited to taxes of 1895. | | | | |
| Loss, etc., in collection of taxes by reason of real estate forfeited to State, judgments refused, errors, personal property tax uncollected, cost of extension and collection of taxes, etc.... | | | \$405,659 40 | |
| Paid account error in '95 and prior tax..... | \$11 71 | | 11 71 | |
| Transferred to this account and charged to the following funds for their proportionate share of deficiency in tax collections of 1895, including additional costs paid to County Collector, viz.: | | | | |
| General sinking fund..... | | | | \$ 8,066 44 |
| School sinking fund | | | | 36 50 |
| River improvement sinking fund..... | | | | 1,356 49 |
| Sewerage sinking fund. | | | | 1,440 13 |
| School tax fund..... | | | | 270,190 90 |
| Public Library fund..... | | | | 17,615 58 |
| Interest account..... | | | | 32,231 78 |
| From General fund (proportion for corporate purposes) | | | | 175,970 78 |
| Transferred to general fund.. | | | \$101,237 49 | |
| | | | \$506,908 60 | \$506,908 60 |
| Fees— | | | | |
| From City Clerk..... | \$7,323 80 | | | \$ 7,323 80 |
| Transferred to general fund. | | | \$ 7,323 80 | |
| | | | \$ 7,323 80 | \$ 7,323 80 |
| Fire Department Fund— | | | | |
| Appropriation March 2, 1896, from taxes of 1896..... | | | | \$816,264 50 |
| Appropriation March 2, 1896, from general fund..... | | | | 750,000 00 |
| From electric light fees..... | \$13,306 35 | | | |
| From water and sewer funds. | 45 00 | | | |

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account.</i> <i>Dr. Cr.</i> |
|--------------------------------|----------------------|------------------|--|
| From warrant deposited back | | \$12 75 | |
| | | | \$13,364 10 |
| For salaries..... | \$1,278,068 10 | | |
| For repairs and maintenance | 24,732 23 | | |
| For building and boat repairs | 11,768 64 | | |
| For miscellaneous expense... | 138,391 95 | | |
| For rents..... | 10,313 37 | | |
| For fire alarm telegraph.... | 53,909 90 | | |
| For new b'ld'gs & apparatus. | 21,956 80 | | |
| For electric light inspection. | 9,345 77 | | |
| | | \$1,548,486 76 | |
| Transferred to general fund. | | 31,141 84 | |
| | | \$1,579,628 60 | \$1,579,628 60 |

Forfeited Bonds—

| | | |
|--|------------|------------|
| From police court bonds forfeited..... | \$1,333 96 | \$1,333 96 |
| Transferred to general fund. | \$1,333 96 | |
| | \$1,333 96 | \$1,333 96 |

General Fund—

| | | |
|--|----------|----------------|
| Balance to the credit of this fund January 1, 1896..... | | \$2,359,091 30 |
| From City Collector, overpay returned..... | \$ 99 00 | |
| From general tax purchase of 1884..... | 21 38 | |
| From rebates of city taxes... | 1,517 99 | |
| From costs recovered by corporation counsel..... | 35 50 | |
| From warrants deposited back..... | 4,056 46 | |
| From County Clerk, overpay returned..... | 30 | |
| From fire department..... | 2 27 | |
| From police department for bailiff's salaries..... | 1,075 00 | |
| From judgment recovered against Chicago & S. S. R. Transit Co..... | 2,250 00 | |
| From tax deed of 1879, Washington Heights..... | 186 47 | |

STATEMENT OF FINANCES

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account.</i> <i>Dr. Cr.</i> |
|--|----------------------|------------------|--|
| From Waukesha Hygeia Springs Co., ordinance July 25, 1892..... | | \$ 255 00 | |
| From paymaster account, error in bailiff's roll. | | 112 16 | |
| From County Clerk, redemption, sale of 1878..... | | 10 82 | |
| From Yondorf Bros., 5 per cent. receipts electric franchise..... | | 36 00 | |
| From Mutual Electric Light and Power Co., 3 per cent. to March 31, 1896..... | | 269 84 | |
| From salary account, money refunded..... | | 83 33 | |
| From rent of polling places.. | | 472 00 | |
| From City Attorney, money refunded..... | | 200 00 | |
| From W. S. Minkler, Mayor's Secretary..... | | 10 00 | |
| From milk judgments per Health Department..... | | 2,635 95 | |
| From Chicago, Jefferson & Urban Transit Co..... | | 811 45 | |
| From Chicago Telephone Co., 3 per cent. gross receipts... | | 41,062 09 | |
| From City Treasurer, interest on balance in his hands.... | | 12,455 12 | |
| From sale of condemned calves per Health Department..... | | 843 40 | |
| From Water department, for tax certificate cancellation | | 1 50 | |
| From interest on tax deeds of 1878..... | | 274 77 | |
| From judgment against J. H. Gaston..... | | 35 00 | |
| From tax purchase, 1893, Rogers Park, redeemed..... | | 6 16 | |
| From Chicago Title and Trust Co., (10 per cent. dividend on bill)..... | | 8 38 | |

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account.</i> <i>Dr. Cr.</i> |
|---|----------------------|------------------|--|
| From violation of smoke ordinance, per Health Department | | \$25 00 | |
| Transferred to this fund from following accounts: | | | \$68,852 34 |
| Building inspection dept... | | | 12,113 86 |
| Board of examining engineers | | | 1,782 22 |
| Boiler inspector..... | | | 7,193 96 |
| City sealer..... | | | 902 20 |
| City markets..... | | | 2,716 05 |
| Costs tax sales..... | | | 66 83 |
| Errors in tax warrants..... | | | 101,237 49 |
| Fees..... | | | 7,323 80 |
| Forfeited bonds..... | | | 1,333 96 |
| Insurance tax, City Collector. | | | 22,767 67 |
| Justices of the Peace collections..... | | | 1,740 00 |
| Metropolitan West Side L. R'y account..... | | | 55,417 48 |
| Oil inspectors' account..... | | | 706 03 |
| Police Court fines..... | | | 57,290 36 |
| Premium on tax sales..... | | | 455 92 |
| Prosecuting Attorney's collections..... | | | 2,150 85 |
| Rents..... | | | 39,150 12 |
| Track elevation damages (old account)..... | | | 99,855 00 |
| Wharfing interest..... | | | 1,377 06 |
| Licenses | | | 3,572,819 75 |
| Transferred to this fund the following unexpended balances of appropriations of 1896: | | | |
| City Cemetery | | | 5 75 |
| Costs of collecting city taxes. | | | 109,756 89 |
| Contingent fund..... | | | 3,603 16 |
| Fire Department fund..... | | | 31,141 84 |
| Legalexpense..... | | | 7,792 79 |
| Police Department fund..... | | | 71,431 17 |
| Printing and stationery..... | | | 579 62 |
| Sewerage fund..... | | | 4,355 81 |
| Salaries... .. | | | 9,692 53 |
| Interest account..... | | | 188,000 00 |

STATEMENT OF FINANCES

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account.</i> <i>Dr. Cr.</i> |
|-----------------------------------|----------------------|------------------|--|
| Expended: | | | |
| For incidental funeral ex- | | | |
| penses Alderman Lawler... | \$1,323 19 | | |
| For exchange on New York... | 710 46 | | |
| For Norwood Park interest... | 219 00 | | |
| For Rogers Park interest | 350 00 | | |
| For services on Finance Com- | | | |
| mittee, of secretary | 500 00 | | |
| For ice inspection.. | 2,541 84 | | |
| For services, Alex. Harper... | 2,750 00 | | |
| For police pensions | 115,000 00 | | |
| For fire pensions..... | 50,887 94 | | |
| For insurance of city property | 1,991 74 | | |
| For special services, City Col- | | | |
| lector's office..... | 1,968 32 | | |
| For salaries, pages of City | | | |
| Council..... | 600 00 | | |
| For safe and cost of setting, | | | |
| City Treasurer's office..... | 2,803 86 | | |
| For repairing vault, Comp- | | | |
| troller's office..... | 14 00 | | |
| For expenses to New York of | | | |
| Comptroller | 116 00 | | |
| For special services, Dr. Reilly, | | | |
| Health Department..... | 600 00 | | |
| For sidewalk, electric light | | | |
| station | 220 00 | | |
| For Election Commissioners' | | | |
| certificate of 1894..... | 33 00 | | |
| For recording plats | 47 45 | | |
| For advertising changes of | | | |
| street names..... | 38 70 | | |
| For special services, S. O. | | | |
| Vaughan, removing garb- | | | |
| age | 14 00 | | |
| For expense in Lake Front | | | |
| case..... | 75 00 | | |
| For expense in Madden & | | | |
| Leonard case..... | 15 00 | | |
| For interest on bonds and | | | |
| coupons (4 days to G. N. B.) | 12 64 | | |
| For coal dealers' licenses re- | | | |
| funded..... | 8,324 60 | | |

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account.</i> <i>Dr. Cr.</i> |
|--|----------------------|------------------|--|
| For printing city ordinances. | \$1,157 36 | | |
| For telephone of City Treasurer | 67 50 | | |
| For fan motor for City Treasurer | 15 00 | | |
| For carriages, funeral of wife of Alderman Hartwick..... | 48 00 | | |
| For repairs to houses owned by city..... | 108 50 | | |
| For building permits refunded..... | 187 00 | | |
| For printing pay rolls | 2,648 91 | | |
| For salaries of bailiffs and clerks (not appropriated for) | 1,909 12 | | |
| For pound charges refunded . | 3 00 | | |
| For abstracts of city property | 13 50 | | |
| For Chicago Lawn Fire Department | 30 00 | | |
| For compiling city ordinances | 2,500 00 | | |
| For car fare of Ald. O'Neill.. | 7 65 | | |
| For surety bonds of employes. | 183 95 | | |
| For fitting up Council committee rooms..... | 2,473 21 | | |
| For postage, City Collector's office..... | 500 00 | | |
| For expenses of Finance Committee | 62 50 | | |
| For printing tax levv | 375 75 | | |
| For excess telegraph expense to W. U. T..... | 177 66 | | |
| For evidence to prosecute liquor dealers..... | 50 00 | | |
| For transcript of suit of I. C. R'y | 21 00 | | |
| For special services, Comptroller's office..... | 83 33 | | |
| For services of attorney in riot claims..... | 300 00 | | |
| For Police Court pay roll (afterward refunded). | 1,075 00 | | |
| For clock in Council Chamber | 82 50 | | |
| For taxes on Gage farm..... | 4,245 31 | | |

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account. Dr. Cr.</i> |
|--|----------------------|------------------|--|
| For forfeit money (refunded G. R. Bennett)..... | \$500 00 | | |
| For Metropolitan W. S. L. R'y (deposit refunded).. | 55,417 48 | | |
| For Master's services and costs (W. S. R'y v. City)... .. | 60 00 | | |
| For illegal tax sale refunded College of P. and S.)..... | 437 54 | | |
| For preparing unpaid special assessment list | 125 00 | | |
| For street lamp fund (Chi- cago Title & Trust bill re- funded)..... | 8 38 | | |
| For taxes on city property ... | 950 28 | | |
| For certain public benefits... | 395 64 | | |
| For liquor licenses refunded.. | 1,240 84 | | |
| For J. R. Wickersham, special assessment 17510 refunded.. | 249 78 | | |
| For costs on city taxes..... | 8 92 | | |
| For Hyde Park assesment re- funded, H. Lewis..... | 201 09 | | |
| For duplicate voucher issued. | 201 09 | | |
| For sundry licenses refunded. | 132 39 | | |
| For fines refunded..... | 19 65 | | |
| For tax certificates redeemed. | 160 84 | | |
| For special taxes, city prop- erty | 520 08 | | |
| For judgment, Fitz Simons & Connell, removing rock | 32,672 36 | | |
| For (special) costs of judg- ments paid | 302 46 | | |
| For Chicago, Madison & Nor- thern, taxes refunded..... | 446 37 | | |
| For special prosecuting att'y. | 100 00 | | |
| For retaining walls (to Mr. and Mrs. Gibson, order of Council) | 1,595 39 | | |
| For service, D Huntz (order of Council July 27, 1896) ... | 215 00 | | |
| For Chicago, Madison & Nor- thern R. R., tax refunded.. | 453 45 | | |
| For salaries, dog pounds..... | 4,905 05 | | |
| For Board of Education, re- fund of deposit | 372 00 | | |

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account.</i> <i>Dr. Cr.</i> |
|--|----------------------|------------------|--|
| For Cameron & Amberg, old claim | \$1,515 64 | | |
| For Hines Lumber Co., old claim | 1,568 91 | | |
| For Stillwell B. S. V. Co., old claim | 12 60 | | |
| Paid the following personal injury and damage claims by order of the City Council: | | | |
| Ellen Tracy..... | 200 00 | | |
| Henry Bohne..... | 55 00 | | |
| Mrs. W. F. Switzer..... | 125 00 | | |
| Patrick Kelly..... | 75 00 | | |
| P. J. Gallagher | 150 00 | | |
| Louis Hess | 30 00 | | |
| Peter Hay | 150 00 | | |
| Margaret A. O'Hanlon..... | 60 00 | | |
| Mrs. Mary Albright..... | 40 00 | | |
| James A. Eaton | 65 00 | | |
| J. R. Howe | 90 00 | | |
| Louis Pasel..... | 65 00 | | |
| Paul Utikel..... | 88 00 | | |
| Mrs. L. J. Van Benthuyzen.. | 800 00 | | |
| Annette Huff..... | 50 00 | | |
| Leopold Joseph | 175 00 | | |
| Nels R. Nelson | 60 00 | | |
| J. Thompson | 30 00 | | |
| Ezra S. Badge | 250 00 | | |
| J. L. Kurth..... | 100 00 | | |
| Charles Fish..... | 100 00 | | |
| Fred Sustman | 25 00 | | |
| Mrs. Nellie Collins..... | 50 00 | | |
| Michael Burns..... | 35 00 | | |
| Edward, Jane and Mary Meredith | 137 50 | | |
| Sarah A. Ames | 200 00 | | |
| W. H. McLean..... | 75 00 | | |
| Gus J. Schultz..... | 30 00 | | |
| J. Szumnarski | 60 00 | | |
| Henry Holloway..... | 87 50 | | |
| John J. Bonagan..... | 100 00 | | |
| Wife of W. G. Rankin..... | 150 00 | | |
| Moxley Livery Co..... | 150 00 | | |
| Dennis O'Connor | 75 00 | | |

STATEMENT OF FINANCES

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account.</i> |
|--|----------------------|------------------|------------------------------|
| | | | <i>Dr.</i> <i>Cr.</i> |

| | |
|-----------------------|----------|
| J. W. Clarke..... | \$150 00 |
| Wise T. McCreedy..... | 70 00 |
| Bueler Paker Co | 19 05 |
| C. D. Webb..... | 150 00 |
| W. H. Gardner | 45 00 |
| W. W. Clay..... | 155 12 |
| Mary Quigley..... | 300 00 |
| George Waibel..... | 50 00 |
| A. V. Warner | 350 00 |
| Hilda Johnson..... | 25 00 |

\$319,517 89

Transferred to departments
in accordance with the reg-
ular appropriation ordi-
nance passed by the City
Council March 2, 1896:

| | |
|---|--------------|
| Department of Public Works fund..... | 625,585 00 |
| Fire department fund | 750,000 00 |
| Health department fund | 70,000 00 |
| Police department fund | 1,500,000 00 |
| Salaries..... | 125,240 00 |
| Sewerage fund..... | 130,600 00 |
| Street lamp fund | 454,347 16 |

Transferred to departments
the following additional
emergency appropriations
by order of the City Council:

| | |
|---|-----------|
| Department of Public Works, May 1896..... | 25,000 00 |
| Health department, July 27, 1896..... | 25,000 00 |
| Civil Service Commission, Nov. 30, 1896..... | 6,000 00 |

Transferred to the following
accounts:

| | |
|--------------------------------|------------|
| Costs of Justices of the Peace | 2,514 35 |
| Erring Woman's Refuge..... | 3,157 00 |
| Errors in tax warrants..... | 175,970 78 |
| House of Good Shepherd..... | 3,157 00 |
| Illinois Humane Society. ... | 85 00 |
| Jurors' and constables' fees.. | 4,357 05 |

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account.</i> | |
|---|----------------------|------------------|------------------------------|-----------------------|
| | | | <i>Dr.</i> | <i>Cr.</i> |
| Tax deeds 1878, special assessments..... | | | \$477 89 | |
| Transferred to the following funds to make good overdrafts of their respective appropriations by order of the City Council: | | | | |
| Civil Service Commission | | | 399 84 | |
| City Clerk's office..... | | | 3,109 71 | |
| Dep't of Public Works..... | | | 48,875 72 | |
| Election expense..... | | | 97,627 33 | |
| House of Correction..... | | | 15,368 60 | |
| Health dep't..... | | | 5,641 64 | |
| Police courts..... | | | 912 45 | |
| Pounds | | | 2,814 79 | |
| Street lamp fund | | | 17,190 06 | |
| Balance to the credit of this fund Dec. 31, 1896 | | | 2,429,754 55 | |
| | | | <u>\$ 6,842,703 81</u> | <u>\$6,842,703 81</u> |
| General Sinking Fund-- | | | | |
| Balance to the credit of this fund Jan. 1, 1896..... | | | | \$ 588,353 38 |
| Appropriation March 2, 1896, from taxes of 1896..... | | | | 120,000 00 |
| For bonds returned and cancelled..... | \$86,000 00 | | \$ 86,000 00 | |
| Transferred to errors in tax warrants, loss in '95 tax ... | | | 8,066 44 | |
| Balance to the credit of this fund Dec. 31, 1896..... | | | 617,886 94 | |
| | | | <u>\$ 708,353 38</u> | <u>\$708,353 38</u> |
| Harrison and Tree Fund-- | | | | |
| Balance to the credit of this fund Jan. 1, 1896 | | | | \$ 174 60 |
| From interest on bonds..... | \$123 80 | | | 123 80 |
| Balance to the credit of this fund Dec. 31, 1896..... | | | \$ 298 40 | |
| | | | <u>\$ 298 40</u> | <u>\$ 298 40</u> |
| Health Department Fund-- | | | | |
| Balance to the credit of this fund Jan. 1, 1896..... | | | | \$ 69,585 81 |
| Appropriation March 2, 1896, from taxes of 1896..... | | | | 74,346 00 |

STATEMENT OF FINANCES

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account.</i> <i>Dr. Cr.</i> |
|--|----------------------|------------------|--|
| Appropriation March 2, 1896, from general fund..... | | | \$70,000 00 |
| Appropriation, additional, from general fund..... | | | 25,000 00 |
| From M. Crawford, Supt | | \$ 6 28 | |
| From sale of anti-toxin | | 3,000 00 | |
| From paymaster, acc't error in pay roll | | 32 50 | |
| | | <hr/> | 3,038 78 |
| For salaries..... | \$115,980 20 | | |
| For miscellaneous expense... | 8,193 29 | | |
| For maintenance C. H. Har- rison bath | 1,912 59 | | |
| For maintenance small pox hospital | 7,583 72 | | |
| For ambulance barn | 1,796 48 | | |
| For laboratory equipment ... | 3,484 54 | | |
| For transportation for insp'r. | 1,318 65 | | |
| For disinfectant material... | 650 64 | | |
| For public vaccination | 20,310 86 | | |
| For diphtheria..... | 16,795 45 | | |
| For construction new bath house..... | 333 76 | | |
| | <hr/> | | \$178,360 18 |
| Transferred to the Dep't of Public Works for construc- tion of new hospital and bath house..... | | | 69,332 05 |
| Transferred from general fund | | | 5,641 64 |
| | | | <hr/> |
| | | | \$ 247,692 23 |
| | | | <hr/> |
| | | | \$247,692 23 |
| | | | <hr/> |

House of Correction—

| | | |
|---|--------------|--------------|
| Appropriation March 2, 1896, from taxes of 1896..... | | \$ 45,000 00 |
| From fines | \$ 10,209 35 | |
| From brick | 12,103 00 | |
| From caning chairs..... | 1,323 05 | |
| From knitting socks..... | 1,675 54 | |
| From sale old material | 823 90 | |
| From brooms | 7,640 75 | |
| From board of prisoners..... | 16,939 50 | |
| From manufacturing depart- ment | 905 35 | |

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account.</i> | |
|--|----------------------|------------------|------------------------------|---------------|
| | | | <i>Dr.</i> | <i>Cr.</i> |
| From laundry | | \$ 5,788 80 | | |
| From miscellaneous sources.. | | 310 69 | | |
| | | <hr/> | | \$ 57,719 93 |
| For dieting and transportation of prisoners, salary of superintendent and assistants, food, light, bedding, clothing, medicine, dieting of officers, sundry supplies, improvements and repairs . | \$118,088 53 | | \$ 118,088 53 | |
| Transferred from general fund | | | | 15,368 60 |
| | | | <hr/> | <hr/> |
| | | | \$ 118,088 53 | \$ 118,088 53 |
| | | | <hr/> | <hr/> |

House of Good Shepherd—

| | | | | |
|--|-------------|--|-------------|-------------|
| From one-half the fines collected by the city for violation of section 5, chapter 25, revised ordinances, transferred from general fund..... | | | | \$ 3,157 00 |
| Paid to House of Good Shepherd | \$ 3,157 00 | | \$ 3,157 00 | |
| | | | <hr/> | <hr/> |
| | | | \$ 3,157 00 | \$ 3,157 00 |
| | | | <hr/> | <hr/> |

Illinois Humane Society—

| | | | | |
|---|----------|--|----------|----------|
| From all fines collected by the city for violation of section 473, chapter 38, revised ordinances, in accordance with an act of the general assembly in force July 1, 1885, transferred from general fund | | | | \$ 85 00 |
| Paid the Illinois Humane Society | \$ 85 00 | | \$ 85 00 | |
| | | | <hr/> | <hr/> |
| | | | \$ 85 00 | \$ 85 00 |
| | | | <hr/> | <hr/> |

Insurance Taxes—

| | | | | |
|---|-----------|--|--|--------------|
| From 2 per cent. tax collected by Treasurer..... | \$ 349 51 | | | |
| From 2 per cent. tax collected by City Collector..... | 22,767 67 | | | |
| | <hr/> | | | \$ 23,117 18 |

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account.</i> <i>Dr. Cr.</i> |
|---|----------------------|------------------|--|
| Refunded 2 per cent. tax..... | \$126 07 | | \$ 126 07 |
| Transferred to general fund.. | | | 22,767 67 |
| Balance to the credit of this account December 31, 1896, liable for refund..... | | | \$ 223 44 |
| | | | <u>\$ 23,117 18</u> <u>\$23,117 18</u> |

Interest Account—

| | | | |
|--|--------------|---------|---|
| Balance to the credit of this account January 1, 1896.... | | | \$372,605 00 |
| Appropriation March 2, 1896, from taxes 1896..... | | | 905,428 71 |
| Cash in American Exchange National Bank..... | | | 326,205 55 |
| Cash in Globe National Bank. | | | 290,356 02 |
| From refund account error in paying coupon..... | | \$10 00 | |
| From warrant deposited back. | | 12 74 | |
| | | | 22 74 |
| For interest on debt..... | \$980,803 21 | | |
| For interest on judgments.... | 50,723 67 | | |
| For interest on time warrants | 37,918 41 | | |
| | | | <u>\$1,069,448 29</u> |
| Deficiency in collection of taxes of 1895, transferred to errors in tax warrants | | | 32,231 78 |
| Surplus transferred to general fund. | | | 188,000 00 |
| Balance to the credit of this fund, December 31, 1896.... | | | 514,937 95 |
| | | | <u>\$1,804,618 02</u> <u>\$1,804,618 02</u> |

Judgment Account—

| | | | |
|--|-----------|------------|---------------|
| Balance to the credit of this account January 1, 1896 ... | | | \$ 426,190 61 |
| Appropriation March 2, 1896, from taxes of 1896..... | | | 400,074 14 |
| From warrants deposited back | | \$5,279 70 | 5,279 70 |
| Paid judgments as follows: | | | |
| Chicago Gas Light & Coke Co. \$ | 11,324 93 | | |
| Chicago Gas Light & Coke Co. | 150 12 | | |
| Chicago Gas Light & Coke Co. | 11,370 95 | | |
| Adelheit French | 1,450 00 | | |

| | Expenditures. | Receipts. | Statement of Account. Dr. Cr. |
|---|---------------|-----------|----------------------------------|
| Hilda Berg..... | \$300 00 | | |
| Sundry judgments, J. H. Pearson, assignee..... | 23,977 55 | | |
| Emily D. Stefano..... | 406 00 | | |
| Union National Bank | 9,007 00 | | |
| Sundry judgments, Royal Trust Co., assignee..... | 12,137 09 | | |
| Rubber Paint Co..... | 4,007 00 | | |
| Sundry judgments, A. S. Trude, assignee..... | 15,903 00 | | |
| Henry McGurren | 607 00 | | |
| Lucy A. Waller..... | 407 00 | | |
| Maria Mueller | 2,257 00 | | |
| Bernard Steele et al. | 4,007 00 | | |
| Kate Hastings..... | 1,357 00 | | |
| T. J. O'Brien..... | 30 00 | | |
| W. H. Eldred..... | 607 00 | | |
| M. Kelleher..... | 1,007 00 | | |
| Bohemian Literary & Ben. Society | 507 00 | | |
| Roxanna A. Wentworth.... | 6,007 00 | | |
| J. L. Murray..... | 2,507 00 | | |
| Anna B. Kibler..... | 2,507 00 | | |
| Paul Machowitz..... | 1,407 00 | | |
| Bertha Olson..... | 1,007 00 | | |
| Andrew Lynch..... | 1,007 00 | | |
| E. B. Godfrey and C. L. Clark | 6,247 00 | | |
| Jesse Lewis..... | 232 00 | | |
| B. A. L. Thomson..... | 257 00 | | |
| D. I. Dunn..... | 557 00 | | |
| W. C. Mueller, admr..... | 2,007 00 | | |
| A. C. Goodman | 1,565 00 | | |
| Frank North, by next friend, J. H. Hurdle..... | 607 00 | | |
| Ed. Smith et al | 604 31 | | |
| W. Harmon..... | 402 00 | | |
| F. W. Jones..... | 250 00 | | |
| P. Pacolek.... | 1,153 00 | | |
| Christian M. Jacobsen..... | 308 50 | | |
| Jos. Wald..... | 577 00 | | |
| Frank Eisler..... | 608 50 | | |
| Jennie Duncan..... | 4,707 00 | | |
| Edward Parrs..... | 907 00 | | |
| Jacob Heidelmeyer..... | 257 00 | | |

STATEMENT OF FINANCES

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account.</i> | |
|--|----------------------|------------------|------------------------------|------------|
| | | | <i>Dr.</i> | <i>Cr.</i> |
| Anton Buchimevicz..... | \$ 257 00 | | | |
| G. Groenendahl..... | 358 60 | | | |
| Jas. Gray | 1,257 00 | | | |
| Nellie Trogden | 508 50 | | | |
| Joshua A. Brown..... | 158 50 | | | |
| Francis Adams..... | 4 00 | | | |
| Annie Riley..... | 1,111 00 | | | |
| A. M. Tagert | 431 00 | | | |
| P. Lulenski..... | 807 00 | | | |
| Aug. French et al..... | 264 76 | | | |
| Manistee Lumber Co..... | 1,589 50 | | | |
| G. Schneider..... | 33 75 | | | |
| Mrs. C. A. Reynolds and J. A. Murphy..... | 20 33 | | | |
| Peter Gueger | 19 50 | | | |
| M. Gorey..... | 20 00 | | | |
| Michl. Carter | 507 00 | | | |
| W. Donnelley..... | 356 00 | | | |
| Lake Gas Co. | 6,088 01 | | | |
| People's Gas Light & Coke Co. | 59,533 18 | | | |
| Chicago G. L. & C. Co..... | 29,428 52 | | | |
| T. D. Carter..... | 1,256 00 | | | |
| T. S. Stark | 1,006 00 | | | |
| August Ebert..... | 807 00 | | | |
| M. Kennelly..... | 382 00 | | | |
| Chicago Gas L. & C. Co..... | 20,000 00 | | | |
| A. E. Brownell et al..... | 2,576 40 | | | |
| A. E. Brownell et al. | 609 97 | | | |
| Mary Ernst | 432 00 | | | |
| Patrick Phelan | 1,607 00 | | | |
| J. O'Malley, Jr..... | 12,118 00 | | | |
| Emma Babcock | 1,507 00 | | | |
| W. T. McKeever..... | 2,827 48 | | | |
| Mary Conway..... | 1,507 00 | | | |
| C. L. Everts | 506 75 | | | |
| Bridget Coleman..... | 607 00 | | | |
| Bertha Loser | 507 00 | | | |
| Mills A. Kruse | 507 00 | | | |
| Matilda C. Eberhart..... | 6,007 00 | | | |
| Chicago Gas L. & Coke Co. . . | 1,200 00 | | | |
| Chicago Gas L. & Coke Co. . . | 28,025 92 | | | |
| J. M. Smith..... | 1,604 48 | | | |
| Emma Weigle | 10,837 00 | | | |

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account.</i> | |
|--|----------------------|------------------|------------------------------|---------------------|
| | | | <i>Dr.</i> | <i>Cr.</i> |
| J. P. Altgeld..... | \$5,007 00 | | | |
| S. T. Messury..... | 9,007 00 | | | |
| Johanna Leseth.... | 15,007 00 | | | |
| John Fleming..... | 375 00 | | | |
| J. Norton..... | 2,607 00 | | | |
| Robt. McVeane..... | 1,511 00 | | | |
| V. Mashek..... | 2,000 00 | | | |
| D. A. Titcomb..... | 10,507 00 | | | |
| P. A. McLaughlin .. | 5,507 00 | | | |
| Roger Plant, Jr..... | 4,007 00 | | | |
| W. H. Herman Smith.. | 556 00 | | | |
| J. F. Walsh..... | 1,567 00 | | | |
| Jacob R. Wall..... | 507 00 | | | |
| Maggie Enright..... | 382 00 | | | |
| Nellie Canfield..... | 807 00 | | | |
| John Murray | 1,007 00 | | | |
| Martin & Kaja Olson .. | 507 00 | | | |
| J. C. Wintermayer. . | 4,507 00 | | | |
| Teresa Carter..... | 1,007 00 | | | |
| Catharine Carter..... | 1,007 00 | | | |
| Rose Carpenter | 907 00 | | | |
| Lydia F. Coulter..... | 707 00 | | | |
| Fred Coburn..... | 2,107 00 | | | |
| Jos. Cermak | 1,757 00 | | | |
| W. Van Epps..... | 5,007 00 | | | |
| A. Friedman..... | 57 00 | | | |
| Fannie Friedman..... | 357 00 | | | |
| E. H. Gill..... | 727 00 | | | |
| Martha A. Gibbs | 2,507 00 | | | |
| John Hansen | 178 78 | | | |
| Henry Keating | 2,207 00 | | | |
| J. J. Karstens | 507 00 | | | |
| Edgar A. Kellogg..... | 507 00 | | | |
| Margaret M. Nicholson .. | 307 00 | | | |
| Martin McFadden | 207 00 | | | |
| Lillie Miller | 1,007 00 | | | |
| Catharine O'Donnell .. | 557 00 | | | |
| Roger Plant..... | 3,007 00 | | | |
| Vic Powlak..... | 57 00 | | | |
| R. M. Skinner..... | 457 00 | | | |
| Sarah J. Tuiesney..... | 1,657 00 | | | |
| W. Whalen | 1 007 00 | | | |
| Balance to the credit of this account, Dec. 31, 1896..... | | | \$428,823 88 | |
| | | | 402,720 57 | |
| | | | <u>\$831,544 45</u> | <u>\$831,544 45</u> |

STATEMENT OF FINANCES

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account.</i> | |
|--|----------------------|------------------|------------------------------|--------------|
| | | | <i>Dr.</i> | <i>Cr.</i> |
| Justices of the Peace Collections— | | | | |
| From M. Eberhardt, J. P.... | | \$21 00 | | |
| From Q. J. Chott, J. P..... | | 5 00 | | |
| From H. Bonnefoi, J. P..... | | 153 00 | | |
| From H. G. Shulte, J. P..... | | 65 00 | | |
| From W. T. Hall, J. P... .. | | 106 00 | | |
| From M. Kehoe, J. P..... | | 14 00 | | |
| From J. Dooley, J. P... .. | | 113 00 | | |
| From J. Blume, J. P..... | | 183 00 | | |
| From G. Kersten, J. P..... | | 8 00 | | |
| From J. Richardson, J. P.... | | 347 00 | | |
| From O. Severson, J. P..... | | 55 00 | | |
| From W. Robbins, J. P..... | | 42 00 | | |
| From H. Underwood, J. P... .. | | 438 00 | | |
| From A. R. Porter, J. P... .. | | 38 00 | | |
| From E. T. Glennon, J. P.... | | 30 00 | | |
| From J. Hennessy, J. P..... | | 46 00 | | |
| From G. E. Clark, J. P..... | | 76 00 | | |
| | | | | \$ 1,740 00 |
| Transferred to general fund.. | | | \$ 1,740 00 | |
| | | | \$ 1,740 00 | \$ 1,740 00 |
| Jurors' and Constables' Fees: | | | | |
| Paid Jurors' and Constables' Fees..... | \$4,357 05 | \$ 4,357 05 | | |
| Transferred from gen'l fund.. | | | | \$ 4,357 05 |
| | | | \$ 4,357 05 | \$ 4,357 05 |
| Legal Expense. | | | | |
| Appropriation March 2, 1896, from taxes of 1896 | | | | \$ 45,000 00 |
| Money refunded from salary advanced | \$799 98 | | | |
| From warrant deposited back | 6 00 | | | |
| | | | | 805 98 |
| For expenses Corporation Counsel's office | \$16,697 11 | | | |
| For expenses City Attorney's office..... | 21,316 08 | | | |
| | | \$ 38,013 19 | | |
| Transferred to general fund.. | | 7,792 79 | | |
| | | \$ 45,805 98 | \$ 45,805 98 | |

Expenditures. Receipts.

Statement of Account.
Dr. Cr.**Licenses.**

From sundry licenses, as follows:

| | |
|-----------------------------|--------------|
| Amusements | \$21,434 60 |
| Auctioneers | 4,975 00 |
| Bakers..... | 3,454 73 |
| Billiards.... | 2,820 05 |
| Bill posters..... | 229 18 |
| Bicycle shops..... | 669 20 |
| Boats..... | 37 00 |
| Bowling Alleys.... | 459 39 |
| Brokers..... | 23,845 17 |
| Butchers | 36,320 84 |
| Cab, coupe and gurney. | 1,471 26 |
| Distillers | 500 00 |
| Dogs..... | 84,482 00 |
| Drays..... | 10 00 |
| Druggists. | 1,884 00 |
| Gunpowder | 306 25 |
| Hacks | 637 98 |
| Hospitals..... | 580 00 |
| Ice wagons | 5,267 35 |
| Junk dealers..... | 5,091 70 |
| Liquors, wholesale | 28,693 10 |
| Liquors, malt..... | 33,985 09 |
| Livery..... | 1,761 72 |
| Lumber yards | 10,558 33 |
| Produce venders | 51 00 |
| Milk dealers..... | 17,136 21 |
| Omnibuses | 367 92 |
| Pawnbrokers | 18,750 00 |
| Peddlers | 92,376 38 |
| Pool tables..... | 1,590 98 |
| Rendering | 3,175 00 |
| Runners..... | 748 00 |
| Saloons | 3,018,464 18 |
| Scales, public..... | 320 00 |
| Scavengers | 327 51 |
| Second-hand dealers | 10,127 00 |
| Shooting galleries..... | 217 62 |
| Soap factories..... | 1,903 35 |
| Street cars..... | 69,578 50 |
| Tanneries | 600 00 |
| Wagons, one-horse..... | 9,160 29 |

STATEMENT OF FINANCES

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account.</i> | |
|--|----------------------|------------------|------------------------------|----------------|
| | | | <i>Dr.</i> | <i>Cr.</i> |
| Wagons, two-horse..... | | \$8,596 08 | | |
| Wagons, junk..... | | 4,475 78 | | |
| Workshops..... | | 583 00 | | |
| Undertakers..... | | 1,896 84 | | |
| Retail malt..... | | 5,639 82 | | |
| Beer bottlers | | 2,564 98 | | |
| Beer bottlers' wagons..... | | 228 32 | | |
| Vinous liquors..... | | 4,237 45 | | |
| Plumbers | | 21,905 00 | | |
| Coal dealers..... | | 8,324 60 | | |
| | | | | \$3,572,819 75 |
| Transferred to general fund.. | | | \$3,572,819 75 | |
| | | | \$3,572,819 75 | \$3,572,819 75 |
| Metropolitan West Side L | | | | |
| R'y Co.— | | | | |
| Balance to the credit of this account January 1, 1896.... | | | | \$55,417 48 |
| Transferred to general fund. | | | \$55,417 48 | |
| | | | \$55,417 48 | \$55,417 48 |
| Mutual Electric Light and | | | | |
| Power Co.— | | | | |
| Balance to the credit of this account, January 1, 1896:.. | | | | \$ 1,000 00 |
| Balance to the credit of this account December 31, 1896. | | | \$ 1,000 00 | |
| | | | \$ 1,000 00 | \$ 1,000 00 |
| Oil Inspector's Account— | | | | |
| From Wm. Raymond, oil in- spector..... | | \$ 8,960 83 | | \$ 8,960 83 |
| Paid for oil inspector's sala- ries, expenses, etc..... | \$8,254 80 | | \$ 8,254 80 | |
| Transferred to general fund . | | | 706 03 | |
| | | | \$ 8,960 83 | \$ 8,960 83 |
| Police Court Fines— | | | | |
| From first district..... | | \$23,921 80 | | |
| From second district..... | | 7,021 90 | | |
| From third district..... | | 7,717 50 | | |
| From fourth district..... | | 6,826 31 | | |
| From fifth district..... | | 3,280 40 | | |
| From sixth district..... | | 3,158 10 | | |
| From seventh district..... | | 9,405 48 | | |

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account.</i> | |
|------------------------------|----------------------|------------------|------------------------------|-------------|
| | | | <i>Dr.</i> | <i>Cr.</i> |
| From eighth district..... | | \$2,786 70 | | |
| From ninth district..... | | 1,546 00 | | |
| From tenth district | | 1,929 35 | | |
| From eleventh district..... | | 198 00 | | |
| From Rogers Park district... | | 157 00 | | |
| | | <hr/> | | \$67,948 54 |

| | | | | |
|--|--------------|--|-------------|-------------|
| For miscellaneous Police Court expenses not provided for by appropriation..... | \$ 10,659 18 | | \$10,659 18 | |
| Transferred to general fund. | | | 57,290 36 | |
| | | | <hr/> | <hr/> |
| | | | \$67,948 54 | \$67,948 54 |

Police Fund—

| | | | | |
|--|-------------|----------|--|----------------|
| Appropriation March 2, 1896, from taxes of 1896..... | | | | \$1,852,810 00 |
| Appropriation March 2, 1896, from general fund..... | | | | 1,500,000 00 |
| From extra service men | \$21,103 40 | | | |
| From sale of horses and material..... | | 622 41 | | |
| From paymaster | | 66 65 | | |
| From refund..... | | 1,137 48 | | |
| | | <hr/> | | 22,929 94 |

| | | | | |
|------------------------------|----------------|--|----------------|----------------|
| For salaries | \$3,150,333 19 | | | |
| For miscellaneous expense .. | 145,377 05 | | | |
| For secret service..... | 8,598 53 | | | |
| | <hr/> | | \$3,304,308 77 | |
| Transferred to general fund. | | | 71,431 17 | |
| | | | <hr/> | <hr/> |
| | | | \$3,375,739 94 | \$3,375,739 94 |

Police Courts—

| | | | | |
|--|-------------|--|-------------|-------------|
| Appropriation March 2, 1896, from taxes of 1896 | | | | \$2,000 00 |
| For coal, cleaning, repairs, gas and supplies for sundry Courts..... | \$ 2,912 45 | | \$ 2,912 45 | |
| Transferred from general fund | | | | 912 45 |
| | | | <hr/> | <hr/> |
| | | | \$ 2,912 45 | \$ 2,912 45 |

| | Expenditures. | Receipts. | Statement of Account. Dr. | Cr. |
|--|---------------|------------|------------------------------|--------------|
| Police Life and Health Insurance Fund— | | | | |
| Balance to the credit of this fund, January 1, 1896 | | | \$ | 522 57 |
| From interest on bonds, etc.. | | \$1,520 00 | | 1,520 00 |
| For medical services, etc..... | \$100 00 | | \$ | 100 00 |
| Balance to the credit of this fund, December 31, 1896 ... | | | | 1,942 57 |
| | | | \$ | 2,042 57 |
| | | | \$ | 2,042 57 |
| Pounds— | | | | |
| From pound-masters | | \$5,048 33 | | \$ 5,048 33 |
| For salaries, rents, fees, costs, etc..... | \$7,863 12 | | \$ | 7,863 12 |
| Transferred from general fund | | | | 2,814 79 |
| | | | \$ | 7,863 12 |
| | | | \$ | 7,863 12 |
| Printing and Stationery— | | | | |
| Appropriation March 2, 1896, from taxes of 1896 | | | | \$ 8,000 00 |
| From warrant deposited back | | \$ 2 05 | | 2 05 |
| For advertising, compiling and printing comptroller's report, blanks, books and stationery | \$7,422 43 | | \$ | 7,422 43 |
| Transferred to general fund.. | | | | 579 62 |
| | | | \$ | 8,002 05 |
| | | | \$ | 8,002 05 |
| Premium on Tax Sales— | | | | |
| From interest on special city tax purchases..... | | \$ 455 92 | | \$ 455 92 |
| Transferred to general fund . | | | | 455 92 |
| | | | \$ | 455 92 |
| | | | \$ | 455 92 |
| Prosecuting Attorney's Collections— | | | | |
| From W. H. Tatge, prosecuting attorney | | \$2,150 85 | | \$ 2,150 85 |
| Transferred to general fund.. | | | \$ | 2,150 85 |
| | | | \$ | 2,150 85 |
| | | | \$ | 2,150 85 |
| Public Library Fund— | | | | |
| Balance to the credit of this fund, January 1, 1896 | | | | \$768,671 82 |
| Appropriation March 2, 1896, from taxes of 1896 | | | | 434,000 00 |
| From W. B. Wickersham, sec'y | \$6,450 70 | | | |
| From O. D. Wetherell, comptr. | 29 90 | | | 6,480 60 |

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account.</i> | |
|---|----------------------|------------------|------------------------------|-----------------------|
| | | | <i>Dr.</i> | <i>Cr.</i> |
| For sundry vouchers audited by the board of directors... | \$564,127 32 | | \$ 564,127 32 | |
| Transferred to errors in tax warrants for loss and cost in collection of taxes 1896.. | | | 17,615 58 | |
| Balance to the credit of this fund, December 31, 1896.... | | | 627,409 52 | |
| | | | <u>\$1,209,152 42</u> | <u>\$1,209,152 42</u> |
| Rents. | | | | |
| From rent of sundry lots.... | | \$35,489 31 | | |
| From rent of sundry docks... | | 4,948 12 | | |
| For repairs and improvement of city property..... | \$ 1,287 31 | | \$ 1,287 31 | \$ 40,437 43 |
| Transferred to general fund.. | | | 39,150 12 | |
| | | | <u>\$ 40,437 43</u> | <u>\$ 40,437 43</u> |
| River Improvement Sinking Fund— | | | | |
| Balance to the credit of this fund, January 1, 1896..... | | | | \$ 198,847 94 |
| Appropriation March 2, 1896, from taxes 1896 | | | | 38,110 00 |
| Deficiency in tax collections transferred to "Errors in Tax Warrants Account".... | | | \$ 1,356 49 | |
| Balance to the credit of this fund, December 31, 1896.... | | | 235,601 45 | |
| | | | <u>\$236,957 94</u> | <u>\$236,957 94</u> |
| Salaries— | | | | |
| Appropriation March 2, 1896, from taxes 1896 | | | | \$106,910 00 |
| Appropriation March 2, 1896, general fund..... | | | | 125,240 00 |
| From contingent fund, pay- master's salaries, refunded. | | \$235 00 | | 235 00 |
| For aldermen.. | \$ 10,278 00 | | | |
| For mayor's office..... | 14,139 96 | | | |
| For comptroller's office | 31,554 60 | | | |
| For city collector's office | 22,200 00 | | | |
| For city clerk's office | 31,855 23 | | | |
| For corporation counsel's office | 38,235 99 | | | |
| For city attorney's office..... | 26,521 19 | | | |

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account.</i> | |
|--|----------------------|------------------|------------------------------|--------------|
| | | | <i>Dr.</i> | <i>Cr.</i> |
| For city physicians | \$3,600 00 | | | |
| For police courts, justices, clerks, etc..... | 44,307 50 | | | |
| | | | \$222,692 47 | |
| Transferred to general fund.. | | | 9,692 53 | |
| | | | \$232,385 00 | \$232,385 00 |
| School Sinking Fund— | | | | |
| Balance to the credit of this fund, January 1, 1896 | | | | \$143,408 75 |
| Appropriation March 2, 1896, from taxes 1896 | | | | 10,300 00 |
| Deficiency in tax collections of 1895 and prior, trans- ferred to "Errors in Tax Warrants"..... | | | \$ 36 50 | |
| Balance to the credit of this fund, December 31, 1896.... | | | 153,672 25 | |
| | | | \$153,708 75 | \$153,708 75 |
| School Fund— | | | | |
| Balance to the credit of this fund, January 1, 1896 | | | | \$ 29,463 04 |
| From rentals, school fund property..... | \$532,223 43 | | | |
| From interest on bonds and mortgage loans | 51,259 43 | | | |
| From state dividend | 279,924 55 | | | |
| From correction in teachers' pay-rolls | 342 21 | | | |
| From tuition, non-resident pupils | 3,973 65 | | | |
| From rebate on special assess- ments..... | 124 73 | | | |
| From court costs, refunded .. | 24 30 | | | |
| From Wt. 22,413 (P. Caproni), deposited back..... | 55 00 | | | |
| From school tax fund..... | 3,331,700 00 | | | 4,199,627 30 |
| Paid school agent, as follows: | | | | |
| Salaries, Superintendents and teachers | \$3,931,485 50 | | | |
| Paid misc., as follows: | | | | |
| Rent for box in safety vault. | 30 00 | | | |
| Margaret O'Donoghue, dower | 75 00 | | | |
| Special assessments..... | 504 28 | | | |

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account.</i> <i>Dr. Cr.</i> |
|--|----------------------|------------------|--|
| Q. C. deed of E. $\frac{1}{2}$, S. E $\frac{1}{4}$, Sec. 34, 38, 14 | \$50 00 | | |
| Accrued interest on city of Chicago water certificates for investment..... | 54 39 | | |
| Expense revaluation school fund property | 1,851 50 | | |
| Costs foreclosure of mortgage property | 266 62 | | |
| Making distribution of values in District 4, T. 41, N. R. 14 | 40 00 | | |
| Duplicate voucher (P. Ca- proni), issued | 55 00 | | \$3,934,412 29 |
| Balance to the credit of this fund, December 31, 1896 ... | | | 294,678 05 |
| | | | <hr/> |
| | | | \$4,229,090 34\$4,229,090 34 |
| | | | <hr/> <hr/> |

School Tax Fund—

| | | |
|---|------------|----------------|
| Appropriation April 10, 1896. | | \$5,869,000 00 |
| Transferred from school tax fund, 1895..... | | 7,983,956 05 |
| From rebates on special as- sessments..... | \$2,524 15 | |
| From sale of old buildings, iron, furniture, etc..... | 1,905 97 | |
| From Department of Public Works, refunded..... | 1,595 77 | |
| From forfeited deposits..... | 1,404 37 | |
| From warrants deposited back..... | 913 38 | |
| From overpayment to con- tractors, refunded..... | 618 00 | |
| From settlement of judgment B'd of Education vs. Hevle et al | 200 00 | |
| From insurance on supplies destroyed and damaged by fire, Nov. 12, 1896 | 4,469 44 | |
| From heating students' hall at Normal School | 50 86 | |
| | <hr/> | \$13,681 94 |

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account.</i> <i>Dr. Cr.</i> |
|---|----------------------|------------------|--|
| Paid bills audited by the B'd of Education, as follows : | | | |
| School sites..... | \$ 144,327 | 50 | |
| New buildings..... | 1,423,673 | 37 | |
| Incidental expenses in con- nection with the erection of new buildings..... | 43,686 | 31 | |
| Architect's department..... | 34,329 | 60 | |
| General repairs..... | 168,364 | 64 | |
| Repairs to heating and vent- ilating apparatus..... | 41,628 | 77 | |
| Apparatus and furniture ...: | 83,171 | 85 | |
| Rentals, sites and buildings. | 104,599 | 66 | |
| Special assessments..... | 15,837 | 15 | |
| Salaries engineer and jani- tors..... | 363,292 | 54 | |
| Official salaries..... | 55,008 | 81 | |
| Fuel | 185,039 | 30 | |
| School supplies | 53,774 | 98 | |
| School house supplies | 19,622 | 81 | |
| Printing and advertising.... | 12,678 | 19 | |
| Evening schools | 75,185 | 73 | |
| School libraries..... | 27,951 | 97 | |
| Tuition Cook County Board of Education | 800 | 00 | |
| Kindergartens..... | 37,414 | 78 | |
| Deaf mute schools..... | 8,957 | 67 | |
| Teachers' training school.... | 3,037 | 60 | |
| Manual training in grammar schools | 22,706 | 03 | |
| High schools | 414,346 | 70 | |
| English high and manual training school | 43,351 | 15 | |
| Compulsory education..... | 15,571 | 30 | |
| Music | 24,910 | 05 | |
| Drawing..... | 39,562 | 39 | |
| Physical culture | 12,858 | 42 | |
| German | 134,631 | 35 | |
| Legal expenses..... | 781 | 30 | |
| Matured bonds and interest coupons of annexed school districts | 62,530 | 20 | |

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account.</i> | |
|---|----------------------|------------------|------------------------------|------------------------|
| | | | <i>Dr.</i> | <i>Cr.</i> |
| Permanent improvements to old buildings | \$65,213 23 | | | |
| Advanced Department of Public Works for water service pipe.... | 985 00 | | | |
| Text books for indigent pupils | 22,323 36 | | | |
| Normal school | 43,399 47 | | | |
| Manual training at House of Correction | 16,364 65 | | | |
| School census..... | 27,413 12 | | | |
| College preparatory..... | 4,557 55 | | | |
| Contingent fund..... | 3,128 00 | | | |
| Paid to school fund for payment of salaries of superintendents and teachers of grammar and prim'y grades | 2,670,731 14 | | | |
| | | | \$6,527,747 64 | |
| Proportion of uncollected taxes for the year 1895. . . | | | 270,190 90 | |
| Balance to the credit of this fund Dec. 31, 1896..... | | | 7,068,699 45 | |
| | | | <u>\$13,866,637 99</u> | <u>\$13,866,637 99</u> |
| Sewerage Fund— | | | | |
| Appropriation March 2, 1896, from taxes of 1896..... | | | | \$ 59,741 00 |
| Appropriation March 2, 1896, from general fund..... | | | | 130,600 00 |
| From cashier, Department of Public Works..... | \$152,976 24 | | | |
| From O. D. Wetherell, comptroller, deposited back.... | | 8 75 | | |
| | | | | 152,984 99 |
| For cleaning and repairing sewers, catch basins, inspection, salaries, pumping works expense, house drains, supplies, etc., as per vouchers audited by the Commissioner of Public Works.... | \$338,970 18 | | \$338,970 18 | |
| Transferred to the general fund..... | | | 4,355 81 | |
| | | | <u>\$343,325 99</u> | <u>\$343,325 99</u> |

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account.</i> | |
|--|----------------------|------------------|------------------------------|-----------------------|
| | | | <i>Dr.</i> | <i>Cr.</i> |
| Sewerage Sinking Fund— | | | | |
| Balance to the credit of this fund, January 1, 1896 | | | | \$160,062 14 |
| Appropriation March 2, 1896, from taxes of 1896..... | | | | 40,170 00 |
| For deficiency in collection of taxes of 1895 and prior (transferred to "Errors in Tax Warrants")..... | | | \$ 1,440 13 | |
| Balance to the credit of this fund December 31, 1896 | | | 198,792 01 | |
| | | | <u>\$200,232 14</u> | <u>\$200,232 14</u> |
| Special Assessment Fund— | | | | |
| Balance to the credit of this fund January 1, 1896..... | | | | \$390,407 26 |
| From County Collector..... | \$3,150,061 72 | | | |
| From City Collector..... | 878,750 55 | | | |
| From City Comptroller..... | 29,068 76 | | | |
| From Dolese & Shepard..... | 120 00 | | | |
| From Paymaster..... | 1 00 | | | |
| From Cashier Public Works.. | 755 00 | | | |
| From Water Department | 18,118 72 | | | |
| | <u> </u> | | | 4,076,875 75 |
| Transferred from tax purchases..... | | | | 16,828 00 |
| Transferred from tax deeds, 1878..... | | | | 165 23 |
| Transferred from general fund..... | | | | 477 89 |
| For abatements, annulled assessments, costs, drains, excess, inspection, land damages, lamp posts, paving, curbing and filling, interest, sidewalks, sewers, water service pipes, labor and material, witness fees, engineering, catch basins and miscellaneous expenditures | \$4,270,722 10 | \$4,270,722 10 | | |
| Balance to credit of this account December 31, 1896.... | | | 214,032 03 | |
| | | | <u>\$4,484,754 13</u> | <u>\$4,484,754 13</u> |

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account.</i> <i>Dr. Cr.</i> |
|--|----------------------|------------------|--|
| Special Deposit Fund— | | | |
| Balance to the credit of this fund January 1, 1896..... | | | \$12,967 80 |
| From Chicago City R'y..... | | \$10,000 00 | |
| From new wires in tunnel for Chicago City R'y | | 326 75 | |
| From warrants deposited back..... | | 240 00 | |
| | | <hr/> | 10,566 75 |
| For Fire Department..... | \$ 4,279 55 | | |
| For electric light B | 12,459 30 | | |
| For electric light C..... | 15,379 03 | | |
| | <hr/> | | \$32,117 88 |
| Transferred from Street Lamp fund | | | 15,000 00 |
| Balance to the credit of this fund December 31, 1896.... | | | 6,416 67 |
| | | | <hr/> |
| | | | <u>\$38,534 55</u> <u>\$38,534 55</u> |

Special Deposit Fund, Department of Public Works—

| | | | |
|---|-------------|--------------|---|
| Balance to the credit of this fund January 1, 1896..... | | | \$ 76,171 83 |
| From cashier Department of Public Works..... | | \$196,322 02 | |
| From duplicate water payments (cashier water office) | | 417 22 | |
| | | <hr/> | 196,739 24 |
| For duplicate water payments refunded..... | \$ 2,694 85 | | |
| For opening and use of streets refunded | 155,437 06 | | |
| For corporation deposits..... | 62,115 19 | | |
| For badge account..... | 25 00 | | |
| | <hr/> | | \$220,272 10 |
| Balance to the credit of this fund December 31, 1896. . . | | | \$ 52,638 97 |
| | | | <hr/> |
| | | | <u>\$272,911 07</u> <u>\$272,911 07</u> |

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account. Dr. Cr.</i> |
|--|----------------------|------------------|--|
| Special Fund W— | | | |
| From cashier Department of Public Works for costs of special assessments, inspection, commissioners, etc., and charged to sundry warrants special assessment fund..... | | \$244,932 28 | \$244,932 28 |
| Paid for costs of special assessment work, etc., account sundry special assessments. | \$244,924 94 | | \$244,924 94 |
| Balance to the credit of this fund December 31, 1896 | | | 7 34 |
| | | | <hr/> |
| | | | \$244,932 28 \$244,932 28 |
| | | | <hr/> |

Street Lamp Fund—

| | | | |
|--|--------------|--|--------------|
| Appropriation March 2, 1896, from taxes of 1896..... | | | \$110,652 84 |
| Appropriation March 2, 1896, from general fund | | | 454,347 16 |
| From sale of junk..... | \$ 77 45 | | |
| From Cook County for setting lights | 280 00 | | |
| From Rankin and Fritsch.... | 127 00 | | |
| From J. S. Cooper | 23 25 | | |
| From Auditorium..... | 56 50 | | |
| From warrants deposited back | 20 74 | | |
| From Gas Co.'s 3½ per cent. gross receipts | 329,519 72 | | |
| From West Chicago Street Ry. | 50,000 00 | | |
| From Columbian Construction Co | 20,000 00 | | |
| From Chicago City Ry. Co.... | 55,000 00 | | |
| From North Chicago Street Ry. Co..... | 40,000 00 | | |
| From Swartz Iron Co..... | 250 39 | | |
| | | | <hr/> |
| | | | 495,355 05 |
| For gas..... | \$705,180 61 | | |
| For miscellaneous gas expenses | 27,719 52 | | |
| For gasoline | 158,699 10 | | |
| For rented electric lights.... | 47,041 55 | | |

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account.</i> <i>Dr. Cr.</i> |
|--|----------------------|------------------|--|
| For maintaining city electric plants | \$123,904 33 | | |
| | | | \$1,062,545 11 |
| Transferred from general fund. | | | \$ 17,190 06 |
| Transferred to special deposit fund. | | | 15,000 00 |
| | | | <u>\$1,077,545 11</u> <u>\$1,077,545 11</u> |

Suspense Account—

| | | | |
|---|------------|-------------|--|
| Balance to the credit of this fund January 1, 1896 | | | \$ 10,236 11 |
| From unclaimed wages and warrants deposited back... | | \$ 8,494 39 | 8,494 39 |
| For unclaimed wages and old accounts reclaimed | \$1,399 47 | \$ 1,399 47 | |
| Balance to the credit of this account, December 31, 1896. | | | 17,331 03 |
| | | | <u>\$ 18,730 50</u> <u>\$18,730 50</u> |

Taxes 1895—

| | | |
|--|---------------|-----------------|
| Uncollected taxes January 1, 1896, charged to this account | | \$14,239,685 13 |
| From North Town Collector. | \$ 344,924 65 | |
| From South Town Collector.. | 1,915,321 85 | |
| From West Town Collector.. | 601,592 44 | |
| From Hyde Park Town Collector | 453,493 70 | |
| From Lake View Town Collector | 110,939 49 | |
| From Lake Town Collector.. | 265,264 80 | |
| From Jefferson Town Collector | 29,370 12 | |
| From Calumet Town Collector | 8,102 85 | |
| From Norwood Park Collector | 1,904 51 | |
| From Evanston Town Collector | 11,217 53 | |
| From Maine Town Collector. | 17 61 | |
| From Niles Town Collector.. | 27 70 | |

STATEMENT OF FINANCES

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account.</i> <i>Dr. Cr.</i> |
|---|----------------------|------------------|--|
| From County Collector..... | \$10,091,848 | 48 | \$13,834,025 73 |
| Deficiency in collection of tax charged to "errors in tax warrants" | | | 405,659 40 |
| | | | <u>\$14,239,685 13</u> <u>\$14,239,685 13</u> |

Taxes, 1896—

Appropriated March 2, 1896,
by the City Council and
credited to the following
accounts and funds:

| | |
|--|-----------------|
| City cemetery..... | \$ 100 00 |
| City Clerks' expense account.. | 15,000 00 |
| Civil Service Commission | 25,000 00 |
| Contingent fund..... | 8,000 00 |
| Cost of Collecting City taxes, etc..... | 211,006 09 |
| Department of Public Works. | 964,631 93 |
| Election expense..... | 125,000 00 |
| Fire department..... | 816,264 50 |
| General sinking fund | 123,600 00 |
| Health department..... | 74,346 00 |
| House of Correction..... | 45,000 00 |
| Interest account..... | 905,428 71 |
| Judgment account | 400,074 14 |
| Legal expense..... | 45,000 00 |
| Police courts..... | 2,000 00 |
| Printing and stationery..... | 8,000 00 |
| Police fund.... | 1,852,810 00 |
| Public library..... | 434,000 00 |
| River improvement sinking fund. | 38,110 00 |
| Salaries..... | 106,910 00 |
| School department tax..... | 5,869,000 00 |
| School sinking fund | 10,300 00 |
| Sewerage fund.... | 59,741 00 |
| Sewerage sinking fund..... | 40,170 00 |
| Street lamp fund..... | 110,652 84 |
| To balance account uncol- lected taxes of 1896 in hands of collectors..... | \$12,290,145 21 |

\$12,290,145 21 \$12,290,145 21

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account.</i> | |
|---|----------------------|------------------|------------------------------|----------------------|
| | | | <i>Dr.</i> | <i>Cr.</i> |
| Tax Deeds, 1878— | | | | |
| From tax redemptions..... | | \$ 165 23 | | \$ 165 23 |
| Transferred to special assessment fund..... | | | \$ 165 23 | |
| | | | <u>\$ 165 23</u> | <u>\$ 165 23</u> |
| Tax Purchases— | | | | |
| From sundry tax redemptions | \$16,828 00 | | | \$ 16,828 00 |
| Transferred to special assessments | | | \$ 16,828 00 | |
| | | | <u>\$ 16,828 00</u> | <u>\$ 16,828 00</u> |
| Tax Loans 1895, Special Time Warrants. | | | | |
| Balance to the credit of this account Dec. 31, 1896..... | | | | \$871,418 25 |
| Paid loans of 1895, as follows : | | | | |
| City Clerk | \$ 7,538 95 | | | |
| Contingent | 619 01 | | | |
| Department of Public Works | 449,693 84 | | | |
| Election expense | 16,816 99 | | | |
| Fire Department | 74,094 91 | | | |
| Health Department | 21,547 59 | | | |
| House of Correction..... | 29,997 58 | | | |
| Judgment account..... | 2,078 23 | | | |
| Legal expense | 1,415 80 | | | |
| Police fund | 64,225 19 | | | |
| Police courts | 938 35 | | | |
| Printing and stationery | 3,683 83 | | | |
| Sewerage | 39,990 97 | | | |
| Street lamp | 158,451 45 | | | |
| | | | \$871,092 69 | |
| Balance to the credit of this acc't, Dec. 31, 1896..... | | | \$ 325 56 | |
| | | | <u>\$ 871,418 25</u> | <u>\$ 871,418 25</u> |
| Time Warrants, 1895. | | | | |
| Balance to the credit of this account, Jan. 1, 1896 | | | | \$326,261 44 |
| Retired during 1896..... | | | \$ 325,311 68 | |
| Balance to the credit of this acc't, Dec. 31, 1896..... | | | 949 76 | |
| | | | <u>\$ 326,261 44</u> | <u>\$326,261 44</u> |

STATEMENT OF FINANCES.

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account.</i> <i>Dr. Cr.</i> |
|---|----------------------|------------------|--|
| Tax Loans 1896, Special Time Warrants 1896. | | | |
| From loans made in anticipation of the collection of taxes of 1896 for the following departments: | | | |
| Dep't of Public Works | \$ 87,150 40 | | |
| Election expense | 4,196 12 | | |
| Fire Department | 7,067 50 | | |
| Health Department | 199 00 | | |
| House of Correction | 3,783 03 | | |
| Legal expense | 1,624 00 | | |
| Police fund | 904,613 32 | | |
| Sewerage fund | 18,691 86 | | |
| Street lamp fund | 1,662 50 | | |
| | | | \$1,028,987 73 |
| Balance to the credit of this account Jan. 1, 1896 | | | \$1,028,987 73 |
| | | | <u>\$1,028,987 73</u> <u>\$1,028,987 73</u> |
| Time Warrants 1896. | | | |
| Issued in payment of accounts for departments, see schedule AB | | | \$1,440,024 80 |
| Balance to the credit of this account Dec. 31, 1896 | | | \$1,440,024 80 |
| | | | <u>\$1,440,024 80</u> <u>\$1,440,024 80</u> |
| Track Elevation Damages. | | | |
| Balance to credit C. R. I. & P. R. R. Jan. 1, 1896 | | | \$ 50,000 00 |
| Balance to credit L. S. & M. S. R'y Jan. 1, 1896 | | | 50,000 00 |
| Paid damages amounting to. | \$ 145 00 | \$ 145 00 | |
| Transferred to general fund by direction of Comptroller. | | | \$ 99,855 00 |
| | | | <u>\$100,000 00</u> <u>\$100,000 00</u> |
| Water Fund. | | | |
| Balance to the credit of this fund Jan. 1, 1896 | | | \$133,299 83 |
| From water rate collections | \$3,187,999 25 | | |
| From cashier, dept. P. wks. | 141,032 40 | | |
| From rent Rookery | 35,000 04 | | |

| | <i>Expenditures.</i> | <i>Receipts.</i> | <i>Statement of Account.</i> <i>Dr. Cr.</i> |
|---|------------------------|------------------------|--|
| From sale of water certificates and interest | | \$166,943 50 | |
| From O. D. Wetherell, refund | | 318 60 | |
| From C. R. Pepper..... | | 500 00 | \$3,531,793 79 |
| For salaries and water dept. expenses, water pipe extension, repairs, service cocks and meters, pumping wks., water certificates, bonds and interest, in accordance with sundry vouchers audited by the Commissioner of Public Works..... | \$3,339,477 30 | | \$3,339,477 30 |
| Balance to the credit of this fund Dec. 31, 1896 | | | 325,616 32 |
| | | | <u>\$3,665,093 62</u> <u>\$3,665,093 62</u> |
| Wharfing Interest. | | | |
| From interest on mortgages.. | \$1,377 06 | | \$1,377 06 |
| Transferred to general fund.. | | \$1,377 06 | |
| | | <u>1,377 06</u> | <u>1,377 06</u> |
| Grand total | <u>\$31,137,287 79</u> | <u>\$31,968,744 88</u> | |

ASSETS AND LIABILITIES—Dec. 31, 1896.

BALANCE SHEET.

Assets.

| | | |
|---|--------------|-----------------|
| Buildings (A)..... | \$17,618,069 | 76 |
| Electric Light Plant (E)..... | 633,146 | 18 |
| Fire Alarm Telegraph (D)..... | 643,392 | 47 |
| Fire Apparatus (C)..... | 855,247 | 00 |
| Law Library | 1,809 | 75 |
| Police Furniture and Equipment (B)..... | 192,148 | 51 |
| Public Library, Miscellaneous (G)..... | 328,794 | 88 |
| Real Estate (F) | 7,594,487 | 24 |
| School Furniture and Heating Apparatus... | 2,713,260 | 00 |
| Street Lamps and Posts..... | 902,150 | 00 |
| Water Works. | 25,336,659 | 58 |
| Wharfing Privilege Mortgages..... | 30,247 | 04 |
| | <hr/> | \$56,849,412 41 |
| Uncollected Taxes, 1896..... | 12,290,145 | 21 |
| Norwood Park Tax Certificates..... | 596 | 78 |
| Cash in Banks..... | 526,561 | 57 |
| Cash in hands of Paymaster..... | 500 | 00 |
| Cash in City Treasury..... | 3,619,102 | 13 |
| | <hr/> | 16,436,905 69 |
| Uncollected Special Assessment Installment Taxes..... | | 1,218,300 00 |
| | | <hr/> |
| | | 74,504.618 10 |

NOTE.—The bracketed letters refer to schedules. (See Index).

LIABILITIES.

Bonds.

| | | |
|--|------------|----|
| City of Chicago 3½ per cent..... | 135,000 | 00 |
| City of Chicago, 4 per cent., includes World's Fair Bonds..... | 11,010,450 | 00 |
| City of Chicago 4½ per cent..... | 489,500 | 00 |
| City of Chicago 7 per cent..... | 1,242,000 | 00 |

| | | |
|---|---------------|-----------------|
| Water Loan 3½ per cent..... | \$ 333,500 00 | |
| Water Loan 3-65 100 per cent..... | 332,000 00 | |
| Water Loan 4 per cent..... | 3,191,500 00 | |
| Water Loan 6 per cent..... | 132,000 00 | |
| Town of Lake Bonds..... | 90,000 00 | |
| Hyde Park Bonds | 50,000 00 | |
| Lake View Bonds..... | 73,000 00 | |
| | <hr/> | \$17,078,950 00 |
| Water Certificates 5 per cent..... | | 1,500 00 |
| Special Improvement Bonds 6 per cent..... | | 1,218,300 00 |
| Trust Funds..... | | 38,920 00 |

Sinking Funds.

| | | |
|------------------------|--------------|--------------|
| General..... | \$617,886 94 | |
| River Improvement..... | 235,601 45 | |
| School..... | 153,672 25 | |
| Sewerage..... | 198,792 01 | |
| | <hr/> | 1,205,952 65 |

Special Liabilities.

| | | |
|---|--------------|--------------|
| Jonathan Burr Fund..... | \$ 202 92 | |
| Harrison and Tree Fund..... | 298 40 | |
| Mutual Electric Light and Power Co..... | 1,000 00 | |
| Police Life and Health Insurance Fund.... | 1,942 57 | |
| Public Library..... | 627,409 52 | |
| School Fund..... | 294,678 05 | |
| School Tax Fund. | 7,068,699 45 | |
| Special Assessments..... | 214,032 03 | |
| Special Deposit Fund..... | 6,416 67 | |
| Special Deposit Fund D. P. W..... | 52,638 97 | |
| Special Fund "W"..... | 7 34 | |
| Water Fund..... | 325,616 32 | |
| | <hr/> | 8,592,942 24 |
| Insurance Tax..... | \$ 223 44 | |
| Interest | 514,937 95 | |
| Judgment Account..... | 402,720 57 | |
| Suspense Account..... | 17,331 03 | |
| Tax Loans, 1895, Special Time Warrants, 1895 (A. B.) | 325 56 | |
| Tax Loans, 1896, Special Time Warrants, 1896 (A. B.) | 1,028,987 73 | |
| Time Warrants, 1895 (A. B.) | 949 76 | |
| Time Warrants, 1896 (A. B.)..... | 1,440,024 80 | |
| Accounts payable, old account, (AA)..... | 279 715 44 | |
| Accounts payable, 1896 (AA)..... | 523,039 97 | |
| | <hr/> | 4,208,256 25 |

Surplus.

| | |
|----------------------|-----------------|
| *Stock Account. | \$39,730,042 41 |
| †General Fund..... | 2,429,754 55 |
| | <hr/> |
| | \$74,504,618 10 |
| | <hr/> |

MEMORANDUM.—There are additional liabilities not on books of City and unprovided for by City Council, as follows:

Special taxes levied against the City for

| | |
|-------------------------------|----------------|
| Street intersections..... | \$ 999,000 00 |
| Unappropriated judgments..... | 1,167,940 72 |
| Due pension funds..... | 192,248 07 |
| | <hr/> |
| Total.... | \$2,359,188 79 |
| | <hr/> |

These liabilities will, it is presumed, be provided for from future taxation but are at present in the nature of floating indebtedness.

*The credit balance of Stock Account represents the surplus value of the buildings, real estate, and water works, etc., of the City, at cost, over the bonded debt.

†The credit balance of General Fund represents the surplus value of all other assets, consisting mainly of cash and uncollected taxes over all liabilities other than the bonded debt.

NOTE.—The bracketed letters refer to schedule. See Index.

NOTE—The Stock Account shows the increase of property at cost and the decrease of the bonded indebtedness since the books were opened after the fire of 1871. The following table will show the increase in the various items embraced in this account for the year 1896.

Water Works—

| | Jan. 1st, 1896. | Jan. 1st, 1897. | Increase. |
|---|-----------------|-----------------|----------------|
| Including lands, buildings, water pipe, tunnels, cribs, engines, machines, etc..... | \$23,933.860 08 | \$25,336.659 58 | \$1,402,799 50 |

School Department—

| | | | |
|--|-----------------|-----------------|----------------|
| Real estate (F) (Appraised 1895) | \$ 4,781,045 00 | \$ 4,976,760 00 | \$ 195,715 00 |
| Buildings (A) | 10,855,185 00 | 12,053,515 00 | 1,200,330 00 |
| Furniture (F) Miscellaneous | 2,454,850 00 | 2,713,260 00 | 258,410 00 |
| Total for School Department | \$18,091,080 00 | \$19,745,535 00 | \$1,654,455 00 |

Police Department—

| | | | |
|---------------------------------------|-----------------|-----------------|------------|
| Real estate (F) | \$ 338,745 00 | \$ 333,745 00 | ..... |
| Buildings (A) | 614,576 93 | 614,576 93 | ..... |
| Furniture and equipment (B) Misc..... | 190,886 28 | 192,148 51 | \$1,262 23 |
| Total for Police Department..... | \$ 1,139,208 21 | \$ 1,140,470 44 | \$1,262 23 |

Fire Department—

| | | | |
|------------------------------------|-----------------|-----------------|-------------|
| Real estate (F) | \$ 369,675 00 | \$ 373,925 00 | \$ 4,250 00 |
| Buildings (A) | 679,900 00 | 689,900 00 | 10,000 00 |
| Fire alarm telegraph (D) Misc..... | 614,243 33 | 643,392 47 | 29,149 14 |
| Fire apparatus (C) Misc..... | 836,847 00 | 855,247 00 | 18,400 00 |
| Total for Fire Department..... | \$ 2,500,665 33 | \$ 2,562,464 47 | \$61,799 14 |

Electric Light Department—

| | | | |
|---------------------------------------|---------------|---------------|----------------|
| Real estate (F)..... | \$ 80,557 24 | \$ 45,557 24 | + \$ 35,000 00 |
| Buildings (A) | 84,237 90 | 84,419 87 | 181 97 |
| Miscellaneous (E) | 601,651 83 | 633,146 18 | 31,494 35 |
| Total for Electric Light Department . | \$ 766,446 97 | \$ 763,123 29 | \$ 3,323 68 |

Public Library—

| | | | |
|--------------------------------|-----------------|-----------------|---------------|
| Buildings (A) | \$ 1,063,370 11 | \$ 1,494,716 58 | \$ 431,346 47 |
| Miscellaneous (G) | 322,791 46 | 328,794 88 | 6,003 42 |
| Total for Public Library | \$ 1,386,161 57 | \$ 1,823,511 46 | \$ 437,349 89 |

Miscellaneous, Realty and Buildings—

| | | | |
|---------------------------|-----------------|-----------------|----------------|
| Real estate (F)..... | \$ 1,829,500 00 | \$ 1,864,500 00 | + \$ 35,000 00 |
| Buildings (A)..... | 2,588,861 35 | 2,678,941 38 | 90,080 03 |
| Total Miscellaneous | \$ 4,413,361 35 | \$ 4,543,441 38 | \$ 130,080 03 |

| | | | |
|---|-----------------|---------------|-----------------|
| Street lamps and posts (I) Miscellaneous... | \$ 1,026,671 00 | \$ 902,150 00 | * \$ 124,521 00 |
| Law library. Miscellaneous..... | 1,555 50 | 1,809 75 | 254 25 |
| Wharfing mortgages, Miscellaneous..... | 30,247 04 | 30,247 04 | ..... |

Recapitulation.

| | | |
|---------------------|--|-----------------|
| | | Increase 1896. |
| Buildings | | \$ 1,731,938 47 |
| Real estate | | 199,965 00 |
| Miscellaneous | | 344,973 39 |
| Water works | | 1,402,799 50 |

| | |
|--|--------------|
| Total increase of City property during 1896..... | 3,679,676 36 |
| Less decrease in street lamps and posts..... | 124,521 00 |

| | |
|----------------------------|-----------------|
| Net increase for 1896..... | \$ 3,555,155 36 |
|----------------------------|-----------------|

For itemized statements of these assets see Schedules A, B, C, D, E, F, G and T, published elsewhere in this report.

† Transferred to Miscellaneous Realty from Electric Light Department.

* Decrease.

Water Works—

| | |
|---|-----------------|
| Include Lands, Buildings, Water Pipes, Land and Lake Tunnels, Cribbs, Pumping Engines, Machinery, etc., this estimate being the actual cost.... | \$25,336,659 58 |
|---|-----------------|

Trust Funds—

| | |
|---|-------------|
| Consist of two Chicago 6 per cent. Water Loan Bonds, Nos. 5159 and 5160; four Chicago 4 per cent. Water Loan Bonds, Nos. 710, 711, 712 and 713; four Chicago 4 per cent. Municipal Bonds, Nos. 316, 317, 318 and 319; one Chicago Sewerage Loan Bond, No. 4434; all of \$1,000.00 each..... | \$11,000 00 |
| Six Chicago 4 per cent. Sewage Loan Bonds, Nos. 4691, 4695, 4696, 4697, 4698 and 4399; five Chicago 4 per cent. Municipal Bonds, Nos. 346, 361, 547, 683 and 795; one Chicago $3\frac{65}{100}$ per cent. Water Loan Bond, No. 5412; of \$500.00 each..... | 6,000 00 |
| Two Chicago 4 per cent. Municipal Bonds, Nos. 1105 and 1980, of \$100.00 each..... | 200 00 |
| Also nine Cook County 5 per cent. Bonds, Nos. 174 175, 176, 177, 178, 179, 250, 251 and 262, of \$1,000.00 each..... | 9,000 00 |
| Twelve Cook County 5 per cent. Bonds, Nos. 478, 479, 480, 501, 542, 549, 550, 551, 552, 553, 554 and 556; one Cook County 4 per cent. Bond, No. 280; of \$500.00 each | 6,500 00 |
| | 32,700 00 |
| The above are held as an investment by the Jonathan Burr Fund. | |
| Also one Chicago 6 per cent. Municipal Bond, No. 779, held as an investment for the Police Life and Health Insurance Fund..... | \$1,000.00 |
| Also four Chicago 4 per cent. Water Loan Bonds, Nos. 6, 7, 8 and 9, of \$1,000.00 each..... | 4,000 00 |
| | 5,000 00 |
| Also two Chicago 4 per cent. Municipal Bonds, Nos. 295 and 296 R, held as an investment for the Harrison and Tree Fund, of \$610.00 each | 1,220 00 |
| | \$38,920 00 |

These bonds are held in trust for the following purposes: With the interest there shall be paid for each year two gold medals, known as the "Carter H. Harrison and Lambert Tree Medals," to be struck off and given to that member of the Police and Fire Department who shall have distinguished himself during the year by the greatest act of bravery in the protection of life and property.

SCHEDULE AA.

ACCOUNTS PAYABLE—OUTSTANDING DECEMBER 31, 1896.

| | |
|--------------------------------------|---------------------|
| Accounts payable—old account | \$279,715 44 |
| Accounts payable—1896: | |
| Board of Examining Engineers | 591 66 |
| City Clerk | 3,208 95 |
| Civil Service Commission | 1,067 32 |
| Contingent fund | 57 80 |
| Costs of Justices of the Peace | 846 80 |
| Department of Public Works | 59,088 88 |
| Election expense | 41,605 42 |
| Erring Woman's Refuge | 434 00 |
| Fire department | 45,880 48 |
| General fund | 1,572 12 |
| Health department | 7,609 50 |
| House of Correction | 5,412 20 |
| House of Good Shepherd | 953 50 |
| Interest account | 761 53 |
| Judgment account | 11,291 57 |
| Jurors' and Constables' fees | 25 00 |
| Legal expense | 3,952 22 |
| Oil Inspector | 69 40 |
| Police courts | 5 90 |
| Police fund | 17,402 32 |
| Pounds | 1 60 |
| Printing and stationery | 867 80 |
| Public library | 2,742 44 |
| Salaries | 356 25 |
| School tax fund | 18,061 32 |
| Sewerage fund | 14,179 21 |
| Special fund "W" | 41,850 42 |
| Street lamp fund | 243,003 05 |
| Suspense account | 141 31 |
| Total | <u>\$802,755 41</u> |

SCHEDULE AB.

TAX LOANS (OUTSTANDING).

Consisting of money borrowed on special time warrants for the use of the following departments:

| | |
|----------------------------------|--------------------|
| Tax loans—1895: | |
| Fire department | \$ 325 56 |
| Tax loans—1896: | |
| Department of Public Works | \$87,150 40 |
| Election expense..... | 4,196 12 |
| Fire department..... | 7,067 50 |
| Health department..... | 199 00 |
| House of Correction | 3,783 03 |
| Legal expense | 1,624 00 |
| Police fund..... | 904,613 32 |
| Sewerage fund..... | 18,691 86 |
| Street lamp fund | 1,662 50 |
| | <hr/> 1,028,987 73 |

TIME WARRANTS (OUTSTANDING).

Issued in payment of accounts for the following departments and funds:

| | |
|-------------------------------|--------------------|
| Time warrants 1895: | |
| Election expense..... | 700 00 |
| Health department..... | 249 76 |
| Time warrants—1896: | |
| | <hr/> 949 76 |
| City Clerk's office | 11,004 04 |
| Civil Service Commission..... | 1,418 55 |
| Contingent fund..... | 280 28 |
| Department Public Works..... | 636,279 11 |
| Election expense..... | 23,215 41 |
| Fire department..... | 135,626 64 |
| Health department | 11,127 21 |
| House of Correction | 29,990 69 |
| Interest account..... | 400,000 00 |
| Judgment account..... | 1,450 00 |
| Legal expense..... | 13,750 32 |
| Police courts..... | 1,340 13 |
| Police department fund | 63,497 26 |
| Printing and stationery | 4,792 44 |
| Sewerage | 26,110 26 |
| Street lamp..... | 80,142 46 |
| | <hr/> 1,440,024 80 |

RECAPITULATION.

| | |
|--|-----------------------|
| Tax loans and time warrants, 1895, outstanding | 1,275 32 |
| Tax loans and time warrants, 1896, outstanding | 2,469,012 53 |
| <hr/> | |
| Total time or revenue warrants, outstanding | |
| December 31, 1896..... | <u>\$2,470,287 85</u> |

SCHEDULE A.

BUILDINGS—MISCELLANEOUS.

| | |
|--|-----------------|
| City Hall..... | \$ 1,717,587 70 |
| City Bridewell (or House of Correction)..... | 823,918 76 |
| Small Pox Hospital..... | 30,090 70 |
| New Hospital (Isolation)..... | 107,344 22 |
| | <hr/> |
| | \$ 2,678,941 38 |

BUILDINGS OCCUPIED BY FIRE DEPARTMENT.

| NUMBER. | LOCATION. | BUILDING. | VALUATION |
|---|--------------------------------------|-------------------------------|-------------|
| No. 1—Engine Co..... and Water Tower Co..... | 269 and 271 Fifth ave | Double three-story brick..... | \$17,500 00 |
| No. 2—Engine Co..... | 2421 and 2423 Sanger st..... | Two-story brick..... | 6,800 00 |
| No. 3—Engine Co..... | 86 West Erie st..... | Three-story brick..... | 8,000 00 |
| No. 4—Engine Co..... | 524 N. Halsted st..... | Two-story brick..... | 10,000 00 |
| No. 5—Engine Co..... | 195 and 197 S. Jefferson st..... | Two-story brick..... | 14,500 00 |
| No. 6—Engine Co..... | 143 Maxwell st..... | Two-story brick..... | 7,500 00 |
| No. 7—Engine Co..... | 31 Blue Island ave..... | Two-story brick..... | 7,000 00 |
| No. 8—Engine Co..... | 1933 Archer ave..... | Two-story brick..... | 7,500 00 |
| No. 9—Engine Co..... | 2527 Cottage Grove ave..... | Two-story brick..... | 8,000 00 |
| No. 10—Engine Co..... and No. 1—Hook and Ladder Co..... | 82 and 84 Pacific ave..... | Three-story brick..... | 21,500 00 |
| No. 11—Engine Co..... | 225 Michigan st..... | Two-story brick..... | 7,000 00 |
| No. 12—Engine Co..... | 611 W Lake st..... | Two-story brick..... | 9,000 00 |
| No. 13—Engine Co..... | 19 Dearborn st..... | Three-story brick..... | 12,500 00 |
| No. 14—Engine Co..... and Storehouse..... | 36 and 38 Chicago ave..... | Two-story brick..... | 15,500 00 |
| No. 15—Engine Co..... | 373 and 375 W. Twenty-second st..... | Two-story brick..... | 7,000 00 |
| No. 16—Engine Co..... | 349 Thirty-first st..... | Two-story brick..... | 8,000 00 |
| No. 17—Engine Co..... | 78 and 80 W. Lake st..... | Two-story brick..... | 9,000 00 |
| No. 18—Engine Co..... and No. 5—Hook and Ladder Co..... | 438 and 440 W. Twelfth st..... | Two-story brick..... | 16,500 00 |
| No. 19—Engine Co..... | 3444 Rhodes ave..... | Three-story brick..... | 12,000 00 |
| No. 20—Engine Co..... | 73 Rawson st..... | Two-story frame..... | 2,000 00 |
| No. 21—Engine Co..... | 13 Taylor st..... | Two-story brick..... | 7,000 00 |
| No. 22—Engine Co..... | 458 and 460 Webster ave..... | Three-story brick..... | 11,000 00 |
| No. 23—Engine Co..... | 693 Hinman st..... | Two-story brick..... | 6,500 00 |

| | | | |
|------------------------------|--------------------------------------|----------------------------------|-------------|
| No. 24—Engine Co..... | 542 and 544 Warren ave..... | Two-story brick..... | \$ 9,000 00 |
| No. 25—Engine Co..... | 127 Canalport ave..... | Two-story brick..... | 7,000 00 |
| No. 26—Engine Co..... | 150 and 152 N. Lincoln st..... | Two-story brick..... | 12,000 00 |
| and | | | |
| No. 7—Hook and Ladder Co..} | 433 and 435 Wells st..... | Two-story brick..... | 7,000 00 |
| No. 27—Engine Co..... | 2867 and 2869 Deering st..... | Two-story brick..... | 11,000 00 |
| No. 28—Engine Co..... | 846 and 848 Thirty-fifth st..... | Two-story brick..... | 7,000 00 |
| and | | | |
| No. 8—Hook and Ladder Co..} | 514 N. Ashland ave..... | Two-story brick..... | 11,000 00 |
| No. 29—Engine Co..... | 756 and 758 W. Congress st..... | Two-story brick..... | 10,000 00 |
| No. 30—Engine Co..... | Foot of Monroe st., Lake front.... | Double two-story brick..... | 20,000 00 |
| No. 31—Engine Co..... | 150 Southport ave..... | Two-story frame, brick barn..... | 2,500 00 |
| No. 32—Engine Co..... | 19 S. Curtis st..... | Three-story brick..... | 12,000 00 |
| and | | | |
| No. 9—Hook and Ladder Co..} | 872 N. Robey st..... | Two-story brick..... | 9,000 00 |
| No. 33—Engine Co..... | 241 and 243 Coulter st..... | Two-story brick..... | 11,000 00 |
| No. 34—Engine Co..... | Foot of La Salle st..... | One-story brick..... | 2,000 00 |
| No. 35—Engine Co..... | 1071 and 1073 Bonney ave..... | Two-story brick..... | 7,500 00 |
| No. 36—Engine Co..... | 1326 and 1328 Thirty-third ct..... | Two-story brick..... | 10,000 00 |
| No. 37—Engine Co..... | 83 and 85 Franklin st..... | Three-story brick..... | 17,500 00 |
| No. 38—Engine Co..... | Sampson Slip..... | Building leased..... | |
| No. 39—Engine Co..... | 77 and 79 Illinois st..... | Three-story brick..... | 12,000 00 |
| and | | | |
| No. 6—Hook and Ladder Co..} | 179 and 181 State st..... | Two-story brick..... | 5,500 00 |
| No. 41—Engine Co..... | 1494 W. Lake st..... | Two-story brick..... | 8,000 00 |
| No. 42—Engine Co..... | 4600 and 4602 Cottage Grove ave.. | Two-story frame..... | 6,000 00 |
| No. 43—Engine Co..... | So. Chicago av. and Ninety-third st. | Two-story frame..... | 6,000 00 |
| No. 44—Engine Co..... | Dobson ave. and Kidder ct..... | Two-story frame..... | 1,200 00 |
| No. 45—Engine Co..... | | | |
| and | | | |
| No. 15—Hook and Ladder Co..} | | | |
| No. 46—Engine Co..... | | | |
| and | | | |
| No. 17—Hook and Ladder Co..} | | | |
| No. 47—Engine Co..... | | | |

BUILDINGS OCCUPIED BY FIRE DEPARTMENT—Continued.

| NUMBER. | LOCATION. | BUILDING. | VALUATION |
|-----------------------|---|---------------------------------------|-------------|
| No. 48—Engine Co..... | 4005 Dearborn st..... | Two-story frame..... | \$ 3,500 00 |
| No. 49—Engine Co..... | 1742 Forty-seventh st..... | Two-story frame..... | 2,500 00 |
| No. 50—Engine Co..... | 4649 and 4651 Wentworth ave..... | Two-story brick..... | 7,000 00 |
| No. 51—Engine Co..... | 6345 Wentworth ave..... | Three-story brick..... | 8,000 00 |
| No. 52—Engine Co..... | Forty-sixth st. and Center ave..... | Two-story frame—on leased ground..... | 2,000 00 |
| No. 53—Engine Co..... | Fortieth st. and Packers ave..... | Two-story frame—on leased ground..... | 2,000 00 |
| No. 54—Engine Co..... | Vincennes ave., between Eightieth and Eighty-first sts..... | Two-story frame..... | 2,000 00 |
| No. 55—Engine Co..... | 687 Sheffield ave..... | Two-story brick..... | 7,000 00 |
| No. 56—Engine Co..... | 144 Noble ave..... | Two-story frame..... | 2,500 00 |
| No. 57—Engine Co..... | 543 and 545 Jane st..... | Two-story brick..... | 11,000 00 |
| No. 58—Engine Co..... | West approach on 95th st. bridge. | One-story and basement frame..... | 2,000 00 |
| No. 59—Engine Co..... | Corner Broadway and Morgan sts., | Two-story brick..... | 1,500 00 |
| No. 60—Engine Co..... | 334 Fifty-fifth st..... | Two-story frame..... | 3,900 00 |
| No. 61—Engine Co..... | 5300 Wentworth ave..... | Two-story frame..... | 3,000 00 |
| No. 62—Engine Co..... | 11453 Michigan ave..... | Two-story frame..... | 3,500 00 |
| No. 63—Engine Co..... | 6328 Jackson ave..... | Two-story brick..... | 7,000 00 |
| No. 64—Engine Co..... | 6244 Laflin st..... | Two-story frame..... | 3,500 00 |
| No. 65—Engine Co..... | 2140 West thirty-ninth st..... | Two-story frame..... | 3,500 00 |
| No. 66—Engine Co..... | 1423 Fillmore st..... | Two-story brick..... | 10,000 00 |
| No. 67—Engine Co..... | 2436 West Fulton st..... | Two-story frame..... | 3,500 00 |
| No. 68—Engine Co..... | West Forty-fourth st. between North and Wabansia aves..... | Two-story frame..... | 3,500 00 |
| No. 69—Engine Co..... | Selwyn ave., Irving Park..... | Two-story frame..... | 1,700 00 |
| No. 70—Engine Co..... | 316 Jamot st..... | Two-story frame..... | 3,000 00 |
| No. 71—Engine Co..... | 489 and 491 N. Branch st..... | Leased..... | |
| No. 72—Engine Co..... | 7914 Duncan ave..... | Two-story frame..... | 2,600 00 |
| No. 73—Engine Co..... | 8630 Emerald ave..... | Two-story frame..... | 2,500 00 |

| | | | |
|--|--------------------------------------|-------------------------------|--------------|
| No. 74—Engine Co..... | N. E. Cor. 106th st. and Ewing ave. | Two-story frame..... | \$ 1,600 00 |
| No. 75—Engine Co..... | N. W. Cor. Desplaines and 121st sts. | Two-story frame..... | 3,000 00 |
| No. 76—Engine Co..... | 824 Courtland st..... | Two-story frame..... | 2,000 00 |
| No. 77—Engine Co..... | 1222 W. 40th place..... | Two-story frame..... | 3,000 00 |
| No. 78—Engine Co..... | 1306 Waveland ave..... | Two-story frame..... | 2,500 00 |
| No. 79—Engine Co..... | 3197 N. Ashland ave..... | Two-story frame..... | 1,800 00 |
| No. 80—Engine Co..... | 108th and Stephenson, Pullman. | Leased..... | |
| No. 2—Hook and Ladder Co..... | 49 W. Washington st..... | Three-story brick..... | 9,500 00 |
| No. 3—Hook and Ladder Co..... | 177 Erie st..... | Three-story brick..... | 12,000 00 |
| No. 4—Hook and Ladder Co..... | 322 Twenty-second st..... | Two-story brick..... | 8,000 00 |
| No. 10—Hook and Ladder Co..... | 409 Larrabee st..... | Two-story brick..... | 7,000 00 |
| No. 11—Hook and Ladder Co..... | 83 Eda st..... | Three-story brick..... | 11,000 00 |
| No. 12—Hook and Ladder Co..... | 1245 W. Thirteenth st..... | Three-story brick..... | 12,000 00 |
| No. 13—Hook and Ladder Co..... | 401 Hoffman ave..... | Two-story frame..... | 2,000 00 |
| No. 14—Hook and Ladder Co..... | 76½ and 78 W. Nineteenth st..... | Three-story brick..... | 11,000 00 |
| No. 16—Hook and Ladder Co..... | Madison ave. and Sixty-second ct. | Two-story frame..... | 2,000 00 |
| No. 18—Hook and Ladder Co..... | 4738 S. Halsted st..... | Two-story brick..... | 10,000 00 |
| No. 19—Hook and Ladder Co..... | 237 W. Chicago ave..... | Two-story brick..... | 10,000 00 |
| No. 20—Hook and Ladder Co..... | 550 Sixty-ninth st..... | Two-story frame..... | 2,200 00 |
| No. 21—Hook and Ladder Co..... | 824 Belmont ave..... | Two-story frame..... | 2,000 00 |
| No. 22—Hook and Ladder Co..... | Foster st. and Lincoln ave..... | Two-story frame..... | 2,000 00 |
| No. 23—Hook and Ladder Co..... | S. E. Cor. Short and Our sts..... | One and one half-story frame. | 1,000 00 |
| No. 24—Hook and Ladder Co..... | S.W. Cor. Grove st. and Vincennes. | Two-story frame..... | 3,500 00 |
| No. 25—Hook and Ladder Co..... | S.E. Cor. Jackson ave. and N. Clark. | Two-story brick..... | 3,000 00 |
| No. 26—Hook and Ladder Co..... | 1985 Wilcox ave..... | Two-story frame..... | 2,500 00 |
| No. 1—Hose Co..... | N.W. Cor. 105th st. and Hoxie ave. | Two-story frame..... | 1,500 00 |
| No. 3—Hose Co..... | 134th st. and Superior ave..... | Two-story frame..... | 1,000 00 |
| Repair Shop..... | 175 Sebor st..... | Three-story brick..... | 15,000 00 |
| Fire Alarm Telegraph..... | 435 Southport ave..... | Two-story frame..... | 2,500 00 |
| Unoccupied..... | 3451 Cottage Grove ave..... | Two-story frame..... | 2,500 00 |
| Unoccupied..... | 2457 W. Kinzie st..... | Two-story frame..... | 100 00 |
| Total buildings occupied by the Fire Department..... | | | \$689,900 00 |

STATEMENT OF FINANCES

SCHEDULE A—BUILDINGS OCCUPIED FOR POLICE STATIONS.

| | LOCATION. | KIND OF BUILDING. | SIZE. | VALUATION |
|------------------------------------|---|--|----------|--------------|
| Cent. Div. Central Station..... | City Hall | Two-story and basement brick station house..... | 88.3x105 | \$ 40,000 00 |
| 1st Precinct | Battery "D" Monroe and Michigan ave | Two-story brick patrol house..... | 24x75 | 5,000 00 |
| 1st Div. 2d Precinct. | Harrison st. and Pacific ave..... | Two-story brick and stone basement station house..... | 30x83.4 | 9,000 00 |
| 2d | Harrison st. and Pacific ave..... | Two-story frame patrol house..... | 20x84 | 600 00 |
| 3d | 318 E. Twenty-second st..... | Two-story brick station house..... | 26.1x32 | 8,000 00 |
| 4th | 2523 Cottage Grove ave..... | Two-story brick patrol house..... | 40.3x102 | 2,500 00 |
| 4th | 144 and 146 Thirty-fifth st..... | Two-story brick and stone basement station and patrol house..... | | 16,000 00 |
| 5th | 844 Thirty-fifth st..... | Two-story brick and stone basement station house..... | | 8,800 00 |
| 6th | 844 Thirty-fifth st..... | Two-story brick and stone basement patrol house and court room..... | 25x115 | 8,100 00 |
| 7th | 2913 Deering st | Two-story brick and stone basement station house and patrol house..... | | 12,000 00 |
| 8th | 3813 California ave..... | One-story brick station house..... | 30x50 | 1,500 00 |
| 8th | 3813 California ave..... | Two-story frame patrol house..... | 24x36 | 2,000 00 |
| 2d Division | | Building three-story brick..... | | 48,000 00 |
| 10th Prec't. | Fifty-third st. and Lake ave | Building rented for station house, two-story frame patrol house..... | | 1,000 00 |
| 11th | 5003 State st..... | Building three-story brick..... | 25x50 | 21,596 58 |
| 12th | Woodlawn | Two-story frame station house..... | 20x70 | 2,500 00 |
| 13th | Dobson ave. and Kidder ct..... | | | |

| | | | | |
|------------------|---|---|----------|-----------|
| 13th Prec't. | Dobson ave. and Kidder ct. | Two-story frame barn. | ..... | \$ 450 00 |
| 14th " | Kensington ave. and Front st. | Two-story brick station house. | 22x47 | 1,500 00 |
| 14th " | Kensington ave. and Front st. | Two-story frame patrol house. | 25x70 | 1,000 00 |
| 15th " | South Chicago ave. and Ninety-third st. | Three-story brick. | ..... | 35,000 00 |
| 16th " | One Hundred and Thirty-fourth st. and Superior ave. | One-story and attic frame station house. | 28x51 | 1,500 00 |
| 17th " | Sixty-fourth st. and Wentworth ave. | Two-story brick and stone basement station house. | 28x84 | 13,000 00 |
| 18th " | ..... | Two-story frame patrol house. | 20x40 | 2,000 00 |
| 19th " | Matteson and Halsted sts. | Two-story brick and stone basement station house. | 32.8x94 | 16,000 00 |
| 19th 3d Division | Matteson and Halsted sts. | Two story brick patrol house. | 27.6x35 | 14,500 00 |
| 21st Prec't. | Morgan and Maxwell sts. | Two-story brick and stone basement station house and patrol house. | 96x100 | 2,000 00 |
| 22d " | 187 Canalport ave. | Two-story brick and stone basement station house and patrol house. | 23x98.5 | 50,000 00 |
| 23d " | Hinman and Paulina sts. | Two-story brick and stone basement station house and patrol house. | ..... | 10,500 00 |
| 24th " | West Thirteenth st. and Oakley ave. | Two-story brick station house and patrol house. | 40x60 | 13,500 00 |
| 25th " | 964 Bonney ave. | Two-story brick and stone foundation station house. | 29x60 | 8,500 00 |
| 27th " | Desplaines st. and Waldo place. | One-story brick and stone foundation patrol house and cell room. | 35x23 | 4,500 00 |
| 27th " | Union and Eagle sts. | Two-story brick and stone basement station house. | 52x141.2 | 2,000 00 |
| 28th " | 609 West Lake st. | Three-story and basem't brick construction, repair shop and patrol house. | 34x47.98 | 50,000 00 |
| 29th " | 526 and 528 Warren ave. | Two-story and basement brick station house and patrol house. | 20x109.6 | 10,800 00 |
| 29th " | 526 and 528 Warren ave. | Two-story brick and stone basement station house. | 35x70 | 5,000 00 |
| 29th " | 526 and 528 Warren ave. | Two-story frame patrol and store house. | 30x40 | 12,000 00 |
| | | | | 1,400 00 |

SCHEDULE A—BUILDINGS OCCUPIED FOR POLICE STATIONS—Continued.

| | LOCATION. | KIND OF BUILDING. | SIZE. | VALUATION |
|--------------|------------------------------------|--|----------|-------------|
| 29th Prec't. | 76, 78 and 80 Campbell ave..... | Two-story brick and stone basement Veterinary Hospital..... | 48.5x58 | \$ 6,500 00 |
| 30th " " | 4239 W. Lake st..... | Two-story brick station house..... | ..... | 4,150 00 |
| 30th " " | 4241 W. Lake st..... | Two-story frame patrol house..... | ..... | } |
| 4TH DIV. | | | | |
| 32d Prec't. | 233 W. Chicago ave..... | Two-story brick and stone basement station house..... | 21.2x121 | 10,806 00 |
| 32d " | 233 W. Chicago ave..... | Two-story brick and stone basement station house, court room..... | 21.2x121 | 4,000 00 |
| 32d " | 233 W. Chicago ave..... | Two-story brick patrol house..... | 31.5x38 | 2,500 00 |
| 33d " | 99 W. North ave..... | Two-story brick and stone basement station house and patrol house..... | ..... | 12,000 00 |
| 33d " | 71 Rawson st..... | Two-story frame station house and one-story brick patrol house..... | ..... | 800 00 |
| 34th " | 637 W. North ave..... | Two-story brick and stone basement station and patrol house..... | 25x115 | 11,730 35 |
| 35th " | 1780 Milwaukee ave..... | Two-story frame station house and one-story frame patrol house..... | ..... | 4,500 00 |
| 36th " | Irving and Milwaukee aves..... | Two-story brick station house..... | 30x50 | 2,500 00 |
| 37th " | Grand ave..... | Two-story brick..... | ..... | 4,300 00 |
| 38th " | East Chicago ave., near Clark st.. | Two-story brick and stone basement station house..... | ..... | 42,000 00 |
| 39th " | Larrabee st. and North ave..... | Three-story brick and stone basement station house, third story extending over Engine Co. No. 4..... | ..... | } |
| 39th " | Larrabee st. and North ave..... | Two-story brick patrol house..... | 24x50 | 18,500 00 |
| 40th " | 958 and 960 N. Halsted st..... | Two-story brick and stone basement station house and patrol house..... | 50x118 | 16,000 00 |
| 41st " | Sheffield, near Diversey ave..... | Two-story brick and stone basement station house and patrol house..... | 24x55 | } |
| 41st " | Sheffield, near Diversey ave..... | One-story frame patrol house..... | ..... | 9,600 00 |

| | | | | |
|--------------------------|--|---|-------|--------------|
| 42d Prec't. | Halsted and Addison sts. | Two-story brick and stone basement station house. | 41x74 | \$10,000 00 |
| 42d | Halsted and Addison sts. | One-story frame patrol house. | 14x47 | 150 00 |
| 42d | Halsted and Addison sts. | Two-story frame barn. | 22x46 | 800 00 |
| 43d | Fifty-ninth and Palmer ave. | Two-story brick. | ..... | 8,000 00 |
| 44th | Rogers Park, Park st. and Jackson ave. | Two-story brick. | ..... | 4,000 00 |
| Total for buildings..... | | | | \$614,576 93 |

SCHEDULE A—PUBLIC LIBRARY—Buildings.

| | |
|--|----------------|
| New Public Library (in course of construction) | \$1,494,716 58 |
|--|----------------|

FIRE APPARATUS.

| | | | | | | |
|---|---|---|---|---|---|--------------|
| Fire Boats, | - | - | - | - | - | \$ 80,000 00 |
| Water Towers, | - | - | - | - | - | 9,500 00 |
| Steam Fire Engines, | - | - | - | - | - | 370,000 00 |
| Chemical Fire Engines, | - | - | - | - | - | 17,400 00 |
| Chemical Engines and Hose Carts Combined, | - | - | - | - | - | 8,000 00 |
| Steam Heaters, | - | - | - | - | - | 9,600 00 |
| Hook and Ladder Trucks, | - | - | - | - | - | 49,500 00 |
| Four-wheel Hose Carts, | - | - | - | - | - | 19,000 00 |
| Two-wheel Hose Carts, | - | - | - | - | - | 8,050 00 |
| Hose Wagons, | - | - | - | - | - | 14,400 00 |
| Supply Wagons, | - | - | - | - | - | 1,000 00 |
| Fuel Wagons, | - | - | - | - | - | 2,500 00 |
| Fire Marshal's Wagons, | - | - | - | - | - | 5,500 00 |
| Chemical Extinguishers and Portable Pumps, | - | - | - | - | - | 800 00 |
| Siamese Connections, | - | - | - | - | - | 4,600 00 |
| Horses, | - | - | - | - | - | 57,250 00 |
| Relief Valves, | - | - | - | - | - | 7,200 00 |
| Hose, | - | - | - | - | - | 88,837 00 |
| Tools and Machinery, Repair Shop, | - | - | - | - | - | 12,525 00 |
| Stock and Supplies, Repair Shop, | - | - | - | - | - | 6,775 00 |
| Engine Patterns, | - | - | - | - | - | 2,300 00 |
| Furniture, Beds and Bedding, | - | - | - | - | - | 50,000 00 |
| Harness, Horse Blankets and Stable Furniture, | - | - | - | - | - | 10,000 00 |
| Stationery and Office Supplies, | - | - | - | - | - | 1,000 00 |
| Steam Heating Apparatus, | - | - | - | - | - | 12,500 00 |
| Hose Pipes, Nozzles, Ladders, Rope, etc., | - | - | - | - | - | 10,000 00 |
| Department Badges, Cap Devices and Buttons, | - | - | - | - | - | 1,500 00 |
| Miscellaneous Supplies, Store Room, | - | - | - | - | - | 510 00 |
| Total, | - | - | - | - | - | \$855,247 00 |

SCHEDULE D.**FIRE ALARM TELEGRAPH.**

| | |
|---|---------------------|
| Annunciator, ammeters and lightning arresters..... | \$ 1,490 52 |
| Bells..... | 30,287 28 |
| Boards, central office and terminal boards..... | 2,798 52 |
| Boxes, fire alarm boxes..... | 199,451 00 |
| Boxes, police, public and test boxes..... | 55,287 00 |
| Buzzers and burglar alarms..... | 77 16 |
| Circuit controllers and clocks, chairs and coolers..... | 3,089 45 |
| Chucks, coils, condensers, chain drops, cabinets, clips, carpet | 4,603 69 |
| Doors, keyless doors, desks and drops..... | 18,153 25 |
| Engine | 180 00 |
| Gongs, galvanometers and generators..... | 20,776 40 |
| Joker outfits and joker relays and keys..... | 25,250 00 |
| Keys, telegraph, pony, answer back and multipolar..... | 236 00 |
| Magnetos..... | 2,366 27 |
| Milammeters, milling and gear cutting, grinding and buffing machine..... | 727 50 |
| Motors and maps..... | 446 50 |
| Push buttons, pole changers, presses and plugs..... | 628 45 |
| Relays, registers, repeaters and rheostats..... | 22,725 92 |
| Scales, spring-jacks and sounders..... | 1,025 00 |
| Switches, miscellaneous, and incandescent lamps..... | 737 60 |
| Switch boards | 3,696 05 |
| Tools, benches and shelving..... | 843 33 |
| Telephone standards, testing racks, telephone sets, tables and testing sets..... | 1,024 10 |
| Vises and voltmeters | 388 46 |
| Whetstone, bridges and galvanometers..... | 260 00 |
| Underground telegraph system..... | 127,878 52 |
| Aerial telegraph lines..... | 103,786 89 |
| Battery | 5,392 30 |
| Wagons and harness..... | 2,980 00 |
| Buildings..... | 6,777 86 |
| Total | <u>\$643,392 47</u> |

RECAPITULATION.

| | |
|--|---------------------|
| Instruments, tools, battery, wagons and harness..... | \$404,949 20 |
| Underground telegraph system..... | 127,878 52 |
| Aerial telegraph system..... | 103,786 89 |
| Buildings..... | 6,777 86 |
| Total | <u>\$643,392 47</u> |

SCHEDULE E.

ELECTRIC LIGHT SYSTEM—MISCELLANEOUS.

| | |
|--|---------------------|
| Eight 125-horse power Ideal engine boilers, etc..... | \$ 26,672 49 |
| One 125-horse power Buckeye engine..... | 2,500 00 |
| One 300-horse power Wright engine..... | 4,500 00 |
| Two 500-horse power Ranken & Fritzch engines, with 3 Heine tubular boilers and connections..... | 42,472 12 |
| Shafting, belting, etc..... | 13,722 11 |
| Six 100-horse power boilers, heaters, etc..... | 18,000 00 |
| Two set Roney stokers..... | 4,144 00 |
| Three heaters and apparatus and steam connections..... | 8,434 97 |
| Thirty-three dynamos, extra armatures, etc..... | 49,232 50 |
| Four switch boards..... | 1,754 00 |
| One thousand four hundred and eighty-eight lamps, signs.. | 46,848 73 |
| Eleven hundred and thirty-one posts and 1,163 hoods..... | 63,619 80 |
| Three 10-ton scales..... | 750 00 |
| Tools..... | 2,000 00 |
| Two hundred miles of underground circuit..... | 172,234 64 |
| Conduit system..... | 165,997 57 |
| Supplies, cable, belting, etc..... | 10,263 25 |
| Total electric light miscellaneous..... | <u>\$633,146 18</u> |

SCHEDULE F.**REAL ESTATE OCCUPIED BY ELECTRIC LIGHT DEPARTMENT.**

| | |
|---|--------------------|
| For Power Station No. 6, Lots 1, 2, 37 and N. $2\frac{2}{3}$ ft. of Lot 36, in Gurley's Sub. of that part of Block 18 lying east of Blue Island avenue, in C. T. Sub. of S. E. $\frac{1}{4}$ Sec. 17, 39, 14..... | \$32,283 84 |
| Power Station No. 8, Lot 2 in S. $\frac{1}{2}$ Block 8, in Cochran, et al. Sub. of W. $\frac{1}{2}$, S. E. $\frac{1}{4}$, Sec. 6, 39, 14, 300x125 ft. . . | 13,273 40 |
| Total real estate occupied by electric light department..... | <u>\$45,557 24</u> |

SCHEDULE A.**BUILDINGS OCCUPIED BY ELECTRIC LIGHT DEPARTMENT.**

| | |
|---|---------------------|
| Power Station No. 1, 1400 and 1402 Indiana avenue | \$ 21,067 49 |
| Power Station No. 4, 98 to 106 East Chicago avenue..... | 15,398 05 |
| Power Station No. 6, 299 and 301 South Halsted street | 33,930 81 |
| Repair shop, 326 to 336 North Lincoln street..... | 14,023 52 |
| Total buildings occupied by electric light department.. | <u>\$ 84,419 87</u> |

RECAPITULATION.

| | |
|--|---------------------|
| Electric light, miscellaneous..... | \$633,146 18 |
| Electric light, real estate..... | 45,557 24 |
| Electric light, buildings | 84,419 87 |
| Total for electric light department..... | <u>\$763,123 29</u> |

INVENTORY—REAL ESTATE, OCCUPIED BY FIRE DEPARTMENT.

| HOW OCCUPIED. | DESCRIPTION. | SUB-LOT OR LOT. | LOT OR S. BLOCK. | BLOCK. | SIZE. | VALUATION. |
|--|--|---------------------------|----------------------------------|-------------------|---|---------------------------------------|
| Engine house No. 1..... | School Section Addition..... | { N. 25 ft. S. 20 ft } | 23 22 | { } | 45x100 ft. | \$45,000 00 |
| Engine house No. 2..... | South Branch Addition..... | W. 1/2 | 14 | 13 | 43x114 ft. | 2,000 00 |
| Engine house No. 3..... | Elston's Addition..... | { } | 3 | 33 | 20x90 ft. | 2,000 40 |
| Engine house No. 4..... | Yates' Re-Subdivision..... | { } | 38 | 72 | 25x110 ft. | 1,500 00 |
| Engine house No. 5..... | School Section Addition..... | | 11 | 28 | 49, 5x150 ft. | 10,000 00 |
| Engine house No. 6..... | Brainard & Evans' Addition..... | | 26 | 8 | 25x110 ft. | 2,500 00 |
| Engine house No. 7..... | S. E 1/4 Sec. 17, T. 39, R. 14..... | | 13 | 1 | 25x120 ft. | 5,000 00 |
| Engine house No. 8..... | S. E 1/4 Sec. 21, T. 39, R. 14..... | E. 25 ft. | 7 | 32 | 25x130 ft. | 6,000 00 |
| Engine house No. 9..... | W. 1/2 Sec. 27, T. 39, R. 14..... | S. 1/2 | 1 | 66 | 30x120 ft. | 6,000 00 |
| Engine house No. 10 and Hook and Ladder No. 1 } | School Section Addition..... | | 14 | 113 | 50x105 ft. | { Leased of School Fund } |
| Engine house No. 11..... | Kinzie's Addition..... | E. 1/2 | 8 | 12 | 25x100 ft. | 6,200 00 |
| Engine house No. 12..... | Section 7, T. 39, R. 14..... | W. 1/2 1 | 4 & 5 | 49 | 30x144 ft. | 6,000 00 |
| Engine house No. 13..... | Original Town..... | 7 | 5, 6 & 7 | 16 | { L. 6x30 ft & 36 1/2 x 80.42 ft. } | { 24,000 00 8,400 00 3,500 00 } |
| Engine house No. 14..... | Higgins, Law & Co.'s Addition. Walsh's Subdivision in S. E. 1/4 Sec. 20, T. 39, R. 14..... | { } | 4 & 5 18 & W. 12 ft. of 17 | 4 E. 1/2 22 | 48x30 ft. 23x202 ft. 12x100 ft. | |
| Engine house No. 15..... | C. T. Subdivision, Sec. 33, T. 39, R. 14; Boone, Jones and Kei- fer's Subdivision of N. 2/4 of block 1 and lot 49, in S. 1/4 of block 1, and E. 75 ft. of block 2. } | { } | 23 | ..... | 35x114 ft. | 4,000 00 |
| Engine house No. 16..... | Original Town..... | 1 | 6 & 7 14 & 15 | 24 6 | 30x140 ft. 50x120 ft. | 10,000 00 8,000 00 |
| Engine house No. 17..... | Waller's Subdivision of N. W. 1/4 N. E 1/4 Sec. 20, T. 39, R. 14..... | { } | | | | |
| Engine house No. 18 and Hook and Ladder No. 5 } | | | | | | |

INVENTORY—REAL ESTATE, OCCUPIED BY FIRE DEPARTMENT.—Continued.

| HOW OCCUPIED. | DESCRIPTION. | SUB-LOT OR LOT. | LOT OR S. BLOCK. | BLOCK. | SIZE. | VALUATION. |
|--|---|--------------------|---------------------|-------------------------------------|--------------|-------------|
| Engine house No. 19..... | University Sub. of that part W. of Cottage Grove Ave. of S.E. 1/4 N. E. 1/4 Sec. 34, T. 39, R. 14 | ..... | 9 | 6 | 50x164.5 ft. | \$10,000 00 |
| Engine house No. 20..... | Sheffield's Addition..... | W. 1/2 of 53 | 3 | 18 | 25x115 ft. | 1,000 00 |
| Engine house No. 21..... | School Section Addition..... | E. 24 ft. | 20 & 23 | 132 | 24x100 ft. | 5,000 00 |
| Engine house No. 22..... | C. T. Sub. Sec. 33, T. 40, R. 14..... | 14 & 15 | 2 | 12 | 48x124 ft. | 2,000 00 |
| Engine house No. 23..... | Section 19, T. 39, R. 14..... | ..... | 47 | 63 | 25x125 ft. | 1,275 00 |
| Engine house No. 24..... | Boone's Addition to Chicago..... | ..... | 21 & 22 | ..... | 48.5x127 ft. | 3,750 00 |
| Engine house No. 25..... | C. T. Subdivision W. 1/2 Sec. 21, T. 39, R. 14..... | 10 | 2 | 38 | 25x120 ft. | 3,750 00 |
| Engine house No. 26 and Hook and Ladder No. 7 } | Section 7, T. 39, R. 14..... | N. 63 ft. 1 | 6 | 30 | 63x 90 ft. | 3,700 00 |
| Engine house No. 27..... | Bronson's Addition..... | 1 & 2 | 189 | ..... | 44x100 ft. | 5,500 00 |
| Engine house No. 28 and Hook and Ladder No. 8 } | S. frac. Sec. 29, T. 39, R. 14..... | 22 & 23 | 3 | 20 | 50x113 ft. | 2,800 00 |
| Engine house No. 29..... | Section 33, T. 39, R. 14..... | W. 1/2 41, 42 | 2 | S. 1/2 9 15 & N. W. 1/2 18 | 24.7x136 ft. | 2,100 00 |
| Engine house No. 30..... | C. T. Subdivision W. 1/2 Sec. 5, T. 39, R. 14..... | 46 | 2 | ..... | 24x125 ft. | 1,400 00 |
| Engine house No. 31..... | McGrath's Addition..... | ..... | 22 | 1 | 50x124 ft. | 4,500 00 |
| Engine house No. 32 and Hook and Ladder No. 9 } | Lake front..... | ..... | ..... | ..... | ..... | ..... |
| Engine house No. 33..... | Sheffield's Addition..... | 17 | 12 | 13 | 25x124 ft. | 900 00 |
| Engine house No. 34..... | Carpenter's Addition..... | 27 | 43 | ..... | 25x115 ft. | 5,000 00 |
| Engine house No. 35..... | E. Randolph Smith's Sub. of blk. 36 of Sheffield's Ad. S. W. 1/4 of S. E. 1/4, Sec. 31, 40, 14..... | ..... | 31 & 32 | 36 | 48x121 ft. | 3,500 00 |
| Engine house No. 36..... | Thompson's Sub. of the S. 1/2 blk. 6 of Laughton's Sub..... | ..... | 24 & 25 | ..... | 48x124 ft. | 1,500 00 |
| Engine house No. 37..... | Foot of La Salle st..... | ..... | ..... | ..... | ..... | ..... |

| | | | | | | |
|---|--|------------|------------------------------------|--------------------|--|------------------|
| Engine house No. 38..... | Chas. Mowry's Sub. E. $\frac{1}{2}$ N. W. $\frac{1}{4}$ of W. $\frac{1}{2}$ N. E. $\frac{1}{4}$ Sec. 26, T. 39, R. 13; Kesler Hair's Sub. of that part of blk. 3 No. of C., B. & Q. Railway. | ..... | 17 & 18 | 3 | { 34.6x69.5 } { & 125 ft. } | { } \$ 450 00 |
| Engine house No. 39..... | Lumbar's Sub. of the N. $\frac{1}{2}$ blk. 12, Canal Trustees' Sub. of E. $\frac{1}{2}$ Sec. 31, T. 39, R. 14. | ..... | 12 & 13 | 12 | 49x126.2 ft. | 1,200 00 |
| Engine house No. 40 and Hook and Ladder No. 6 | Original Town..... | 1 & 2 | 5 | 41 | 40.5x80 ft. | 25,000 00 |
| Engine house No. 41..... | Sampson's Slip..... | ..... | ..... | ..... | ..... | ..... |
| Engine house No. 42..... | Newberry's Addition..... | ..... | 19 & 20 | 12 | 40x100 ft. | 5,000 00 |
| Engine house No. 43..... | Attrill's Subdivision of Stave's Subdivision N. E. $\frac{1}{4}$ Sec. 36, T. 40, R. 13..... | 17 & 18 | 2, 3, 5 | 1 | 61x110 ft. | 1,800 00 |
| Engine house No. 44..... | Lee and others' Subdivision of the S. W. $\frac{1}{4}$ Sec. 12, T. 39, R. 13..... | 21 & 22 | 3 | W. $\frac{1}{2}$ 8 | 50x170 ft. | 3,000 00 |
| Engine house No. 45 and Hook and Ladder No. 15..... | Circuit Court partition of the E. 15 8-10 chains S. $\frac{1}{2}$ S. E. $\frac{1}{4}$ S. E. $\frac{1}{4}$ Sec. 3, T. 38, R. 14..... | ..... | 1 & 2 | 1 | 53x116 ft. | 2,250 00 |
| Engine house No. 46 and Hook and Ladder No. 17..... | South Chicago Subdivision of C. & C. C. & D. Co., in Secs. 5 and 6, T. 37, R. 15..... | ..... | 28 | 91 | { 184 $\frac{1}{2}$ x142 $\frac{1}{2}$ } { x130x11 $\frac{1}{2}$ } { ft. } | 2,500 00 |
| Engine house No. 47..... | Cornell's Subdivision of Secs. 26 and 35, T. 38, R. 14 (ex N. 40 ft.)..... | ..... | 9 & 10 | 46 | 87.6x100 ft. | 1,000 00 |
| Engine house No. 48..... | Rawson & Akerly's Subdivision N. 74 rod N. E. $\frac{1}{4}$ Sec. 4, T. 38, R. 14..... | S. 9 ft. { | 41 } 42 } | 6 | 34x110 ft. | 3,000 00 |
| Engine house No. 49..... | Emery's Subdivision W. $\frac{1}{2}$ S. E. $\frac{1}{4}$ S. E. $\frac{1}{4}$ Sec. 6, T. 38, R. 14..... | ..... | 4 & 5 | ..... | 48x120 ft. | 1,000 00 |
| Engine house No. 50..... | Prout and Coleman's Re-Subdivision E. 19 acres of S. 25 acres S. E. $\frac{1}{4}$ Sec. 4, T. 38, R. 14..... | ..... | 17, 18 & } S 6 ft. } of 19 } | 2 | 56x106 ft. | 2,500 00 |

| | | | | | |
|--------------------------|---|----|----------------------|----------------------|-----------|
| Engine house No. 62..... | Stanwood's Subdivision S. $\frac{1}{2}$ S. $\frac{1}{2}$ S. W. $\frac{1}{4}$ N. W. $\frac{1}{4}$ Section 22, T. 37, R. 14..... | 23 | 1 | 24x122 2 ft. | \$ 800 00 |
| Engine house No. 63..... | Temporary Quarters, Washington Driving Park..... | | | | |
| Engine house No. 64..... | T. B. Shout's Subdivision E. $\frac{1}{2}$ S. W. $\frac{1}{4}$ S. W. $\frac{1}{4}$ S. W. $\frac{1}{4}$ Section 17, T. 38, R. 14..... | 18 | | 31x124.75 ft. | 700 00 |
| Engine house No. 65..... | Corwith's Re-Subdivision in W. $\frac{1}{2}$ S. E. $\frac{1}{4}$ Section 36, T. 39, R. 13..... | 11 | 15 | 43.4x125 5 ft. | 1,100 00 |
| Engine house No. 66..... | Chas. H. Kehl's Subdivision, Geo. W. Clark's Subdivision E. $\frac{1}{2}$ S. W. $\frac{1}{4}$ Section 13, T. 39, R. 13 Re-Subdivision of block 10 in Subdivision of S. $\frac{1}{2}$ Section 10, T. 39, R. 13..... | 2 | { 17, 18, 23, 24, } | { 50x125 ft. } | 2,300 00 |
| Engine house No. 67..... | Beginning at a point in E. line of block 2, being the W. line of Columbia ave. 489.6 feet N. of the S. line of Section 34, T. 40, R. 13, thence S. along E. line of said block 50 feet, thence W. parallel with S. line of said Section 125 feet to a 16 foot alley, thence N. along E. line of said alley 50 feet, thence E. along S. line of a 16 foot alley 125 feet to beginning..... | 25 | | 27.4x136 2 ft. | 950 00 |
| Engine house No. 68..... | Irving Park, S. E. $\frac{1}{4}$ Sec 15, T. 40, R. 13..... | | | 50x125 ft. | 800 00 |
| Engine house No. 69..... | Thos. Lyman's Subdivision in County Clerk's division of E. $\frac{1}{2}$ N. W. $\frac{1}{4}$ Sec. 18, T. 40, R. 14. Leased ground..... | 17 | 25 | 50x156 ft. | 600 00 |
| Engine house No. 70..... | | 5 | { 1, 2, 3, 4 5 & 6 } | { 37 44x121 55 ft. } | 1,500 00 |
| Engine house No. 71..... | | | | | |

STATEMENT OF FINANCES

INVENTORY—REAL ESTATE, OCCUPIED BY FIRE DEPARTMENT.—Continued.

| HOW OCCUPIED. | DESCRIPTION. | SUB-LOT OR LOT. | LOT OR S. BLOCK. | BLOCK. | SIZE. | VALUATION. |
|----------------------------------|--|--------------------|--------------------------|--------|-----------------|-------------|
| Engine house No. 72..... | Rohrer's Subdivision in Circuit Court Commissioner's partition of the N. E. $\frac{1}{4}$ of the N. W. $\frac{1}{4}$ and N. W. $\frac{1}{4}$ of the N. E. $\frac{1}{4}$ of Sec. 31, T. 38, R. 15.. | 12 | 5 | ..... | 30.5x24.3 ft. | \$ 1,150 00 |
| Engine house No. 73..... | Sisson & Newman's South Englewood Subdivision in S. W. $\frac{1}{4}$ Sec. 33, T. 38, R. 14..... | ..... | 1 | 13 | 35x245 ft. | 1,000 00 |
| Engine house No. 74..... | Taylor's Subdivision W. $\frac{1}{2}$ N. E. $\frac{1}{4}$ N. W. $\frac{1}{4}$ Sec. 17, T. 37, R. 15 | ..... | 11 | 1 | 25x120.65 ft. | 700 00 |
| Engine house No. 75..... | West Pullman Subdivision, N. W. $\frac{1}{4}$ and W. $\frac{1}{2}$ N. E. $\frac{1}{4}$ Sec. 28, T. 37, R. 14..... | ..... | 22 & 23 | 16 | 55.4x123.4 ft. | 900 00 |
| Engine house No. 76..... | Drew's Subdivision in Simon's Subdivision S. E. $\frac{1}{4}$ Sec. 35, T. 40, R. 13..... | ..... | 7 & E. $\frac{1}{2}$ 8 | 8 | 37.5x138.75 ft. | 450 00 |
| Engine house No. 77..... | Merigold's Subdivision..... | ..... | 43 & 44 | 2 | 48x125.8 ft. | 1,650 00 |
| Engine house No. 78..... | Buckingham's Second Addition to L. V. in N. E. $\frac{1}{4}$ Sec. 20, T. 40, R. 14..... | ..... | 34 E. 11.38 ft. of 35 | 3 | 36.38x134 ft. | 2,250 00 |
| Engine house No. 79..... | Summerdale, Re-Subdivision lots 31 to 40, Louis E. Henry's Subdivision S. W. $\frac{1}{4}$ N. W. $\frac{1}{4}$ Sec. 8, T. 40, R. 14..... | ..... | 1 | 2 | 32x125 ft. | 1,000 00 |
| Engine house No. 80..... | Leased ground..... | ..... | ..... | ..... | ..... | ..... |
| Hook and Ladder house No. 2..... | Original Town..... | 1 | 9 | 46 | 30x76 ft. | 18,000 00 |
| Hook and Ladder house No. 3..... | Newberry's Addition..... | ..... | 14 | 3 | 25x100 ft. | 3,500 00 |

| | | | | | | |
|--------------------------------------|---|--|--------------|--|---|-------------|
| Hook and Ladder house No. 4..... | E. Frac. S. E. $\frac{1}{4}$ Sec. 21, T. 39, R. 14..... | $\left\{ \begin{array}{l} 40 \\ W \frac{1}{2} 41 \end{array} \right\}$ | 2 to 5 | 45 | 36x142 ft. | \$ 3,000 00 |
| Hook and Ladder House No. 10..... | Sheffield's Addition: N. 30 ft. of S. 50 ft..... | ..... | 5 | 1 | 30x127 ft. | 5,000 00 |
| Hook and Ladder House No. 11..... | N. 30 ft. of S. 50 ft..... | 1 | 6 & 7 | 1 | | |
| Hook and Ladder House No. 12..... | Freeman's Addition N. W. $\frac{1}{2}$ N. E. $\frac{1}{2}$ Section 34, T. 39, R. 14..... | ..... | 46 | B | 24.5x130.9ft | 1,950 00 |
| Hook and Ladder House No. 13..... | Section 19, T. 39, N. R. 14..... | ..... | 76 & 77 | 7 | 48x119.6 ft. | 1,800 00 |
| Hook and Ladder House No. 14..... | Harriet Farlin's Subdivision of that part S. of C. & N.-W. Ry. of E. $\frac{1}{2}$ N. E. $\frac{1}{2}$ N. W. $\frac{1}{2}$ S. E. $\frac{1}{2}$ Section 25, T. 40, R. 13..... | ..... | 1 & 2 | 16 | $\left\{ \begin{array}{l} 18.5x161 \\ 125.8x117.1ft. \end{array} \right\}$ | 750 00 |
| Hook and Ladder House No. 16..... | Walsh & McMullen's Subdivis- ion of S. $\frac{1}{2}$ S. E. $\frac{1}{2}$ Section 20, T. 38, R. 14..... | ..... | 24 & 25 | 5 | 44.75x98 ft. | 4,200 00 |
| Hook and Ladder House No. 18..... | Bogue's Subdivision S. E. $\frac{1}{2}$ S. E. $\frac{1}{2}$ W. of R. R., Section 14, T. 38, R. 14..... | ..... | 1, 2, 3, & 4 | 4 | $\left\{ \begin{array}{l} 128.5x125.12 \\ ft. \end{array} \right\}$ | 3,300 00 |
| Hook and Ladder House No. 19..... | Newberry's Subdivision North 1,162.65 ft. E. $\frac{1}{2}$ N. E. $\frac{1}{2}$, ex. R. R., Section 8, T. 38, R. 14..... | S. $\frac{1}{2}$ all of | ..... | $\left\{ \begin{array}{l} 2 \\ 3 \end{array} \right\}$ | 36x125 ft. | 5,000 00 |
| Hook and Ladder House No. 20..... | Ogden's Addition..... | W. 30 ft. | 42 | 3, 4, & 5 | 30x121 ft. | 6,500 00 |
| Hook and Ladder House No. 21..... | Bates' Re-Subdivision N. E. $\frac{1}{2}$ S. W. $\frac{1}{2}$, ex., etc., Section 21, T. 38, R. 14..... | ..... | 10 | 7 | 50x141 ft. | 1,000 00 |
| Hook and Ladder House No. 22..... | Altgeld's Subdivision blocks 1, 2, 3, 4, 7 and N. $\frac{1}{2}$ of 6, in sub- division of that part N. E. of Lincoln avenue in N. W. $\frac{1}{2}$ of Section 29, T. 40, R. 14..... | ..... | ..... | 37 | 27x88 ft. | 1,100 00 |
| Hook and Ladder House No. 22..... | Jefferson. S. W. $\frac{1}{2}$ Section 9, T. 40, R. 13..... | ..... | 1 | 39 | $\left\{ \begin{array}{l} 50x122.8 ft. \\ 52.1x139.6ft. \end{array} \right\}$ | 300 00 |

INVENTORY—REAL ESTATE, OCCUPIED BY FIRE DEPARTMENT.—Continued.

| HOW OCCUPIED. | DESCRIPTION. | SUB-LOT OR LOT. | LOT OR S. BLOCK. | BLOCK. | SIZE. | VALUATION. |
|--|--|--------------------|---------------------|----------|--------------------|------------|
| Hook and Ladder House No. 23 | A. Conrad's Subdivision of part of original lot 8, being the N. ½ (except 208 feet) Bowman's original Sub. in S. E. ¼ Sec 12, T. 40, R. 14. .... | ..... | 4 & 5 | ..... | 50x125 ft. | \$ 575 00 |
| Hook and Ladder House No. 24 | Unsubdivided part S. of and adjoining Grove st., between Depot st. and Vincennes av. in E. ½ N. W. ¼ Section 17, T. 37, R. 14. .... | ..... | ..... | ..... | ..... | ..... |
| Hook and Ladder House No. 25 | F. H. Doland's Subdivision in Section 31, T. 41, R. 13. | N. 25 ft. | 7 | 17 | 25x175 ft. | 500 00 |
| Hook and Ladder house No. 26 | W. M. Derby's Subdivision, N. E. ¼ Sec. 15, T. 39, R. 13. .... | ..... | 47 & 48 | 4 | 51.82 x 121.40 ft. | 2,000 00 |
| Hose house No. 1 | Chas. H. Nix's Addition to So. Chicago, frac. Sec. 12, T. 37, R. 14. .... | ..... | 24 | 2 | 24x125 ft. | 775 00 |
| Hose house No. 3 | C. & C. C. & D. Co.'s Sub., N. E. ¼ S. E. ¼ and S. 5 acres S. E. ¼ N. E. ¼ Sec 31, T. 37, R. 15. .... | ..... | 6 | 13 | 32x118.88 ft. | 400 00 |
| Vacant, S W. cor. Frank- lin st. and Stewart ave. | Mayfair, W. ½ N. W. ¼ Sec. 15, T. 40, R. 13. .... | ..... | 1 | 35 | 50x125 ft. | 1,000 00 |
| 2547 W. Kinzie st. | Graft's Subdivision of S. E. ¼ N. E. ¼ Sec. 9, T. 39, R. 13. .... | ..... | 35 | 8 | 25x125 ft. | 500 00 |
| 3451 Cottage Grove ave. . | S. ½ N. E. ¼ Sec. 34, T. 39, R. 14, Oakenwald. | N. 25 } ft. } | 12 | S. Tier. | 25x122 ft. | 2,500 00 |
| Vacant, 263-271 Court- land st. | Johnson's Subdivision E. ½ S. E. ¼ Sec. 36, T. 40, R. 13. .... | ..... | W. ½ 67 | 1 | 48x124 ft. | 800 00 |

| Property | Subdivision of blk. | 27, 28 & 29 | 75x120.37 ft. | \$14,500 00 |
|--|---|--------------|---------------------------|--------------|
| Repair shop..... | 18, School Section Addition.. | | | |
| Vacant | Boardman's Subdivision of lots 1, 3, and 4, McGinnis <i>et al.</i> Sub. lot 1, block 45, Sheffield's Add. S. W. ½ Sec. 29, T. 40, R. 14.... | 12 | 32.6x141.18ft | 1,300 00 |
| Incomplete Building..... | Snow & Dickenson Sub. in Wm. Hale Thompson's Add., N. W. ¼ Section 23, T. 38, R. 13..... | 2 | 1, 2, & 3 50x125 ft. | 3,000 00 |
| Vacant, 1111 South place | R. C. Hall's Addition to Argyle S. ¾ S. W. ¼ Sec. 8, T. 40, R. 14.. | { 12 } | { 1 } 25x138.46 ft. | 1,250 00 |
| Total Real Estate occupied by Fire Department..... | | | | \$373,925 00 |

STATEMENT OF FINANCES

REAL ESTATE OCCUPIED FOR POLICE PURPOSES.

| Div. | Prec. | LOCATION. | DESCRIPTION. | SUB. LOT | LOT. | BLK. | SIZE. | VALUA- TION. |
|------|-------|-----------------------------|--|-----------------------------|---------------------------------|-------|------------------------------|-----------------|
| Gen | Cen | City Hall..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Cen | 1 | Battery "D"..... | School Section Addition, owned | ..... | ..... | ..... | ..... | ..... |
| Cen | 2 | Harrison st. and Pacific av | by School Fund..... | ..... | ..... | ..... | ..... | ..... |
| 1 | 3 | No. 318 E. 22d st..... | C. T. Subdivision Sec. 21, T. 39, R. 14..... | 42 & E. $\frac{1}{4}$ 41 | 2, 3, 4 & 5 | 45 | 36x148 | \$ 6,000 00 |
| 1 | 4 | No. 2253 Cottage Grove av. | C. T. Subdivision Sec. 27, T. 39, R. 14..... | ..... | N. $\frac{1}{4}$ 1 | 66 | 30x136.27 | 10,000 00 |
| 1 | 5 | No. 144 and 146 35th st.. | University Subdivision Sec. 34, T. 39, R. 14..... | ..... | E. 40 $\frac{1}{4}$ ft. 12 & 13 | 6 | 40 $\frac{1}{4}$ x102 | 9,500 00 |
| 1 | 6 | No. 844 35th st..... | Gallagher's Subdivision S. $\frac{1}{4}$ blk. 9 in C. T. Subdivision Sec. 33, T. 39, R. 14..... | ..... | 42 | 2 | 25x136 | 3,060 00 |
| 1 | 7 | No. 2913 Deering st..... | C. T. Subdivision Sec. 29, T. 39, R. 14..... | 20 | 2 | 26 | 25x120 | 2,650 00 |
| 1 | 8 | No. 3813 California ave.... | Corwith's Resubdivision of lots 81 to 120, 124 to 140, 152 to 157, 144 to 150, of W. $\frac{1}{4}$ S. E. $\frac{1}{4}$..... | ..... | 27 & 28 | 14 | 50x125 | 1,000 00 |
| 2 | 10 | 53d st. and Lake ave..... | Sub Lot 1 of Church Subdivis- ion of Lot 4 and S. $\frac{1}{4}$ Lot 3 in Hyde Park Subdivision. S. E. $\frac{1}{4}$ Sec. 11, T. 38, R. 14..... | 1 | 4 & S. $\frac{1}{4}$ 3 | 19 | { 80x119 & } 80.5x114.7 { | 20,000 00 |
| 2 | 11 | No. 5003 State st..... | Derby's Subdivision of S. W. $\frac{1}{4}$ of N. W. $\frac{1}{4}$ Sec. 10, T. 38, R. 14. | ..... | E. 25 ft. 47 & 48 | ..... | 25x100..... | ..... |
| 2 | 12 | Woodlawn..... | Lots 19 and 20 in F. W. Green's Subdivision of Lots 75, 76, 81, 82, 83 and 88 in Robertson's Subdivision of the N. 25 $\frac{1}{4}$ acres of that part of E. $\frac{1}{4}$ of the N. E. $\frac{1}{4}$ of Sec. 23, T. 38 N., R. 14, E. of Third P. M., lying E. of I. C. R. R. tracks. | ..... | ..... | ..... | ..... | 10,125 00 |

| | | | | | | | |
|---|----|--|---|------------------|-------|--|------------|
| 2 | 13 | Grand Crossing, cor. Dobson ave. and Kidder st. | Cornell's Subdivision S. W. 4 Sec. 36, T. 38, R. 14..... | S. 40 ft. 6 & 10 | 6 | 50x100 | \$2,000 00 |
| 2 | 14 | Kensington ave..... | Kensington, a Subdivision in S. W. 4 Sec. 22, T. 37, R. 14..... | 1 | 3 | $\left\{ \begin{array}{l} 27.73 \times 213 \\ \& 64.7 \times 210 \end{array} \right\}$ | 3,000 00 |
| 2 | 15 | Corner S. Chicago ave. and 93d st., South Chicago.. | Chicago and Calumet Canal and Dock Co.'s Subdivision of S. E. 4 Sec. 6, T. 37, R. 15..... | N. part 28 | 91 | 92.91x130x190 | 2,500 00 |
| 2 | 16 | Corner 89th st. and Exchange ave., South Chicago | Chicago and Calumet Canal and Dock Co.'s Subdivision of parts of Secs 5 and 6, T. 37, R. 15..... | 24 & 25 | 24 | 55x138.5 | 3,500 00 |
| 2 | 17 | Hegewisch, cor. 134th st. and Superior ave..... | Chicago and Calumet Canal and Dock Co.'s Subdivision of S. 5 acres of S. E. 4 of N. E. 4 Sec. 31, T. 37, R. 15..... | 6 | 13 | 32x118.88 | 1,000 00 |
| 2 | 18 | Wentworth ave..... | County Clerk's Division in Shedmore & Judd's Subdivision in N. E. 4, Section 21, T. 38, R. 14..... | 10 | 2 | 75x188 | 16,000 00 |
| 2 | 19 | Cor. 85th and Green sts. | Delemater & Dickman's Subdivision, Section 32, T. 38, R. 14..... | 1 | 8 | 80x125 | 2,500 00 |
| 3 | 21 | Cor. Mattes'n & Halsted sts | Newberry's Subdivision of N. 1,162.65 ft. of E. 4 of N. E. 4, Section 8, T. 38, R. 14..... | 1 & N. 4 2 | 4 | 36x125 | 5,500 00 |
| 3 | 22 | Cor. Morgan & Maxwell sts | Brand's Addition, Section 20, T. 39, R. 14..... | 1, 2, 3 & 4 | 14 | 96x100 | 13,000 00 |
| | | Canalport ave..... | Walsh & McMullen's Subdivision, S. E. 4, Section 20, T. 39, R. 14..... | ..... | ..... | $\left\{ \begin{array}{l} 23 \times 97.4 \times \\ 111.5 \times 26.4 \end{array} \right\}$ | 3,500 00 |

STATEMENT OF FINANCES

REAL ESTATE OCCUPIED FOR POLICE PURPOSES.—Continued.

| Div. | Prec | LOCATION. | DESCRIPTION. | SUB-LOT | LOT. | Blk. | SIZE. | VALUA- TION. |
|------|------|--|--|--------------------|------------------------------|-----------|-----------|-----------------|
| 3 | 23 | Cor. Hinman and Paulina sts | Division of Section 19, T. 39, R. 14..... | ..... | 48 | 63 | 25x125 | \$ 6,000 00 |
| 3 | 24 | Cor. W. 13th st. and Oak- ley ave..... | Crozier's Subdivision, W. $\frac{1}{4}$ of S. W. $\frac{1}{4}$, Section 19, T. 39, R. 14..... | ..... | 78 & 79 | 7 | 48x119 | 5,000 00 |
| 3 | 25 | No. 964 Bonney ave..... | J. H. Kedzie's Subdivision in Lansing's Addition, Section 23, T. 39, R. 13..... | ..... | 68 | ..... | 64.8x125 | 2,000 00 |
| 3 | 27 | Cor. Desplaines st. and Waldo pl..... | Original Town..... | ..... | { S. 60 1-7 & E. 4 of 8 } | { 67 } | 60x144 | 50,000 00 |
| 3 | 28 | No. 609 W. Lake st..... | C. T. Subdivision, Section 7, T. 39, R. 14 | E. $\frac{1}{2}$ 1 | ..... | 49 | 30x145 | 6,500 00 |
| 3 | 29 | No. 526 and 528 Warren ave | L. D. Boone's Addition, Section 12, T. 39, R. 13..... | ..... | 27, 28 & 29 | ..... | 74x127 | 8,000 00 |
| 3 | 29 | No. 76, 78 and 80 Campbell ave | L. D. Boone's Addition, Section 12, T. 39, R. 13..... | ..... | S. $\frac{1}{2}$ 21 & 22 | ..... | 48.5x63.5 | 4,000 00 |
| 3 | 30 | No. 4239 W. Lake st..... | West Chicago Land Co.'s Sub- division, Section 10, T. 39, R. 13..... | ..... | 62 | 3 | 25x180 | 1,950 00 |
| 4 | 32 | No. 233 W. Chicago ave.. | Ogden's Addition, N. E $\frac{1}{4}$, Sec- tion 8, T. 39, R. 14..... | ..... | 2, 3 & E. $\frac{1}{4}$ 4 | 42 | 52.4x121 | 10,000 00 |
| 4 | 33 | No. 99 W. North ave. (Rawson st.) | Sheffield's Addition, Section 32, T. 40, R. 14 ..... | ..... | W. $\frac{1}{2}$ 69 | 18 | 25x125 | 1,100 00 |

| | | | | | | | | |
|---|----|--|--|-------------|---------------------------------|-------|---|----------------------|
| 4 | 33 | No. 99 W. North ave. (Rawson st.) | Sheffield's Addition, Section 32, T. 40, R. 14 ..... | ..... | E. $\frac{1}{2}$ 53 | 18 | 25x125 | \$ 2,500 00 |
| 4 | 34 | No. 637 W. North ave. | Johnson's Subdivision in N. W. $\frac{1}{4}$, Section 31, T. 40, R. 14 | 20-21 | ..... | 1 | 49x130 | 6,500 00 |
| 4 | 35 | No. 2768 Milwaukee ave. | Attrill's Subdivision of part of blocks 3, 2 and 5 of Stave's Subdivision of N. E. $\frac{1}{4}$, Sec- tion 36, T. 40, R. 13 ..... | ..... | 3 | 2 | 25x111 | 4,000 00 |
| 4 | 36 | Irving and Milwaukee aves | Gray's Subdivision, Section 22, T. 40, R. 13 ..... | ..... | 2 | 22 | 22 $\frac{1}{2}$ x22 $\frac{1}{2}$ x168 74.3x105.4 52.65x79.5 | 3,500 00 2,220 00 |
| 4 | 37 | Cragin | Hosmer's Subdivision of Cragin Irving Park Subdivision in S. E. $\frac{1}{4}$ Sec. 15, Artesian well | 8. Lot of 1 | ..... | 1 | 150x173.6 | 800 00 |
| 4 | 36 | Cragin | Wolcott's Addition, Sec. 9, T. 39, R. 14 ..... | ..... | 20 | 24 | 60x130 | 26,000 00 |
| 4 | 38 | No. 240 E. Chicago av. | Sheffield's Addition, Sec. 33, T. 40, R. 14 ..... | ..... | 17 & E. $\frac{1}{2}$ of 16 | 35 | 20.6x116 | 12,000 00 |
| 4 | 39 | Larrabee and North av. .. | Sheffield's Addition, Sec. 33, T. 40, R. 14 | E 20 of 1 | E. 20 | 1 | 24x50 50x125 | 9,000 00 |
| 4 | 40 | No. 958 N. Halsted st. | Sheffield's Addition, Sub-Blk 1. Edson's Subdivision of E. $\frac{1}{4}$ of Lots 10 and 13 of C. T. Sub- division of S. E. $\frac{1}{4}$, Sec. 29, T. 40, R. 14 | 1 | 5, 6 and 7 13 and 14 | 4 | 25x140 | 3,000 00 |
| 4 | 41 | Sheffield nr. Diversey av. | S. 150 ft. of E. 150 ft. in Laflin, Smith & Dyer's Subdivision of N. E. $\frac{1}{4}$ Sec. 20, T. 40, R. 14 ..... | ..... | 85 | ..... | 150x150 | 15,000 00 |
| 4 | 42 | Halsted and Addison sts. . | Nic Miller's Subdivision, S. W. $\frac{1}{4}$ of N. E. $\frac{1}{4}$, Sec. 7, T. 40, R. 14 ..... | ..... | 25 and 26 | 7 | 58x125 | 2,000 00 |
| 4 | 43 | Palmer and 59th sts. | Original Town ..... | ..... | { North 31 ft of } 32 & 35 } | 65 | 34x80.8 | 25,000 00 |
| 4 | 44 | Repair Shop—Union and Eagle sts | | | | | | |

STATEMENT OF FINANCES

REAL ESTATE OCCUPIED FOR POLICE PURPOSES.—Continued.

| Div. | Prec. | LOCATION. | DESCRIPTION. | SUB-LOT | LOT. | Blk. | SIZE. | VALUATION. |
|------------|-------|-----------|---|---------|---------|------|-------|--------------|
| 4 | 44 | ..... | Lots 7 and 8, Block 17, in Sub-division of that part E. of C. & N.-W. R. R. tracks S. of Indian boundary line in Sec. 30, T. 41, R. 14, and all of the N. E. $\frac{1}{4}$ and that part N. W. $\frac{1}{4}$ of Rogers Park Township of Evanston, 38 x 60 feet, and vacant lot adjoining..... | ..... | 7 and 8 | 17 | ..... | ..... |
| Total..... | | | | | | | | |
| | | | | | | | | \$333,745 00 |

RECAPITULATION FOR POLICE DEPARTMENT.

| | |
|---|-----------------|
| Total value of real estate..... | \$ 333,745 00 |
| Total value buildings | 614,576 93 |
| Total value of stock, supplies and apparatus..... | 192,148 51 |
| <hr/> | |
| | \$ 1,140,470 44 |

SCHEDULE F—Continued.

REAL ESTATE—MISCELLANEOUS.

| HOW OCCUPIED. | DESCRIPTION. | LOT. | BLK. | SIZE. | VALUATION. |
|---|--|------------------------|------|---|----------------|
| Leased by W. H. Rand. | Original Town..... | 7 | 58 | 50x159 ft. | \$400,000 00 |
| Leased to Joseph Downey. | School Section..... | 22 | 46 | 28x82½ ft. | 5,000 00 |
| *Formerly Armory Station. | School Section..... | 1 & 2 | 83 | 124x100 ft. | 200,000 00 |
| Old North Market Ground, now leased free of rent to Cook County for Criminal Court and Jail. | Wolcott's Addition..... | 10 & 13 and 23 to 26 } | 7 | 102x218 ft. | 30,000 00 |
| House of Correction..... | That part of E. ½ of S. W. ¼ of Section 25, T. 30, R. 13, lying N. of West Branch of the South Branch of the Chicago River, about 58 acres..... | | | | |
| Quarantine Grounds, a small portion now used for South Div. Pound..... | C. T. Sub-Division, Sec. 83, T. 39, R. 14, the S. ½ of that part of Lot 15, E. of R. R. Also the N. ½ of said Lot 15, W. of R. R., except S. 1 acre thereof..... | | | 60 x 631 and 457 feet on 33d st., by 544 ft. deep | 58,000 00 |
| Vacant..... | Van H. Higgins' Sub. Sec. 4, 38, 14..... | 16, 17 & 18 | 9 | | 500 00 |
| Vacant..... | Duncan's Sub. Sec. 4, 38, 14..... | 36, 37 & 38 | 8 | 75x125 ft. | 3,000 00 |
| Vacant..... | J. R. Mann's Sub. Sec. 21, 34, 14..... | 7, 8, 9 & 10 | 9 | 102x125 ft. | 2,000 00 |
| | School Trustees' Sub. Sec. 16, 37, 14..... | 55 | 63 | 25x125 ft. | 1,000 00 |
| *Reservoir Lots—School Section addition lots 33 to 50, inclusive, of block 116, size 177.6x173.3. | All right and interest of the City of Chicago in and to the following described property, to-wit: Part of S. E. ¼ of Sec. 28, T. 40, R. 14; part of E. ¼ of Sec. 33, T. 40, R. 14; part of S. W. ¼ of Sec. 34, T. 40, R. 14; also lands east of Michigan avenue, south of Randolph street and north of Twelfth street. | | | | 600,000 00 |
| | N. E. ¼ of Section 25, T. 39, R. 12; also Lot 1 in the Partition of Commissioners appointed by the Circuit Court of Cook County, Ills., of the west part of the N. W. ¼ and the west part of the S. W. ¼ of Section 30, T. 39, R. 13, containing in all 246 acres, more or less, and known as the Atwood Place Farm. | | | | |
| | 65 acres of the west 100 acres of the S. W. ¼ of Section 35, T. 39, R. 12, undivided ½ of C. T. Sub. W. ½ Sections 27, 39, 14, W. ½ block 34. Estimated at..... | | | | 500,000 00 |
| | Lots 40, 41, 42, 43, 44, 45 and 46 in Laflin & Loomis' Re-Sub. of S. ½ block 41 in C. T. Sub. W. ½ of N. E. ¼ Sec. 17, T. 40, R. 14 (175x182.6 feet not used)..... | | | | 35,000 00 |
| | Total miscellaneous real estate..... | | | | \$1,864,500 00 |

* Leased for 99 years.

SCHEDULE F—Real Estate, Buildings, Heating

| SCHOOL. | Description of Lot. | Sub-Lot. | Lot. | Block. |
|------------------------------------|--|----------|---|-------------------------|
| Englewood High..... | Commencing on the W side of S E $\frac{1}{4}$ of Sec 16, 38, 14, at a point 32 rods N of S W cor thereof, thence E 40 rods, thence N to the N line of Lot 16, in School Trustees' Sub of said Sec, thence W along the N line of said lot to the W bounds of said $\frac{1}{4}$ of said Sec, thence S along the W bounds of said $\frac{1}{4}$ of said Sec to the place of beginning, except and reserving a strip two rods wide off from the E and W bounds of said premises for the purpose of a street or public highway | | | |
| Hyde Park High | Hopkins' Add to Hyde Park in Sec 14, 38, 14 | | 16 to 20 | 63 |
| Jefferson High | Montrose, being Sub of N W $\frac{1}{4}$ and N $\frac{1}{2}$ of S W $\frac{1}{4}$ of Sec 15, and the E $\frac{1}{2}$ of Lot 1 of Sub of N $\frac{1}{2}$ of Sec 16, 40, 13 | | 8 to 17 | 15 |
| Lake High. | Fowler's Re Sub of part of S Side Homestead Add, Sec. 9, 38, 14; also a 12-foot alley lying between the W side of Lot 324 and E side of Lots 319, 320, 321, 322 and 323 | | 319 to 327 | |
| Lake View High..... | Commencing at the cor of the N line of Graceland ave and the E line of Ashland ave, extended thence running 292 feet N on said E line of Ashland ave, thence E parallel to Graceland ave 160 feet, thence S 292 feet to N line of Graceland ave, thence W to the point of beginning, being in the S W $\frac{1}{4}$ Sec 17, 40, 14, Ashland's Add to Ravenswood | | | |
| N. Division High..... | Johnston, Roberts & Sporr's Add | 5 to 8 | 13 5 to 15, 16, 17, | 5 9 |
| N. W. Division High.. | Watson, Town & Davis' Sub in W $\frac{1}{2}$ N W $\frac{1}{4}$ of Sec 6, 39, 14 | | 27, 30, 31, 34, 35 and 42 to 47 } | 11 |
| S. Division High | Assessor's Sub Blks 81 and 82. Canal Trustees' Sub of W $\frac{1}{2}$ Sec 27, 39, 14 | | 15 | |
| W. Division High..... | Ashland's 2d Add and alley running E and W through Blk 23 | 1 to 7 | 19 to 25 1 to 11 | 23 |
| Adams..... | In Sub of Lot 6, Delevan's Add | | 4 to 11 | |
| Agassiz | Broomell's Sub W $\frac{1}{2}$ Lots 10 and 13, in C T Sub in E $\frac{1}{2}$ Sec 29, 40, 14 | | 5 and 8 150 ft of 4 } | |
| Alcott..... | County Clerk's Div of Out-lot D, in Wrightwood | 10 | | |
| Alice L. Barnard..... | Blue Island L and B Co's Sub of Washington Heights, in N W $\frac{1}{4}$ Sec. 17, 37, 14 | | 6 and 7 | 7 |
| Amerson Brof Henry H. Nash..... | Craft's Sub of S E $\frac{1}{4}$ of N E $\frac{1}{4}$ of Sec 9, 39, 13 | | 25 to 31 | 6 |
| Andersen | Lull & Mayer's Sub of Cochran's Sub of W $\frac{1}{2}$ S E $\frac{1}{4}$ Sec 6, 39, 14 | | 7 to 19 | 1 |
| Andersenville | Andersenville, being a Sub of part of Secs 7 and 8, 40, 14 | | 1 | 1 |
| Andrew Jackson | Geo Steele's Sub of Blk 14, in Canal Trustees' Sub, S E $\frac{1}{4}$, Sec 17, 39, 14 | | 34 to 40 | |
| Armour Street | Bickerdike's Addition | 14 to 23 | 1 to 15 | 14 |
| Arnold. | Canal Trustees' Sub 33, 40, 14 | | 38, 39, 42, 43, 46, 47, 50, 51, 54 S 12 feet of 7 and 8 to 17 } | E $\frac{1}{2}$ 26 2 |
| Auburn Park..... | Schorling's Sub in S $\frac{1}{2}$ Sec 33, 38, 14 | | | |

Apparatus and Furniture Used for School Purposes.

| Size of Lot. | Value of Lot. | Class of Buildings. | Value of Building. | Value of Heating Apparatus. | Value of Furniture, Libraries, etc. | Total Estimated Value of School Prop. |
|---------------|---------------|---------------------|--------------------|-----------------------------|-------------------------------------|---------------------------------------|
| 240x549 | \$ 43,200 | 3 s brick | \$ 63,000 | \$ 3,400 | \$ 8,000 | \$ 117,600 |
| 250x175 | 25,000 | 3 s brick | 111,600 | 22,100 | 9,925 | 168,625 |
| 270x250 | 8,100 | 3 s brick | 22,100 | 2,500 | 2,000 | 34,700 |
| 217.3x125 | 13,020 | 3 s brick | 46,300 | 6,500 | 2,250 | 68,070 |
| 342x160.35 | 25,440 | 3 s brick | 46,140 | 15,575 | 4,000 | 91,155 |
| 219.81x109 | 36,460 | 3 s brick | 60,000 | 7,000 | 2,250 | 105,710 |
| 268.5x124 | 16,110 | 2 s brick | 102,900 | 20,500 | 10,060 | 149,590 |
| 157.08x181½ | 54,980 | 3 s brick | 82,000 | 8,000 | 3,700 | 148,680 |
| 267x173.3 | 51,250 | 3 s brick | 131,500 | 21,550 | 7,500 | 211,800 |
| 265x125.31 | 70,000 | 3 s brick | 75,260 | 10,000 | 3,300 | 158,560 |
| 400x120 | 37,500 | 2 s brick | 30,000 | 5,000 | 2,500 | 95,200 |
| 250x150 | 45,000 | 2 s brick | 18,000 | 1,000 | 1,200 | |
| | | 2 s brick | 36,000 | 2,500 | 2,500 | 86,000 |
| 210x380 | 6,300 | 3 s brick | 57,000 | 13,500 | 2,500 | 79,300 |
| 175x120 | 4,200 | 2 s wood | 4,500 | 150 | 650 | 10,200 |
| | | 1 s wood | 500 | 50 | 150 | |
| 315.5x110 | 31,500 | 3 s brick | 44,300 | 11,100 | 2,800 | 145,200 |
| 124.4 | | 3 s brick | 47,500 | 6,000 | 2,500 | |
| 117.48x333 | 10,570 | 2 s brick | 7,000 | 1,700 | 500 | 19,770 |
| 168.76x100.44 | 29,200 | 3 s brick | 52,000 | 12,600 | 3,000 | 96,800 |
| 170x150 | 17,000 | 3 s brick | 22,500 | 8,000 | 1,000 | 98,000 |
| | | 3 s brick | 40,000 | 7,000 | 2,500 | |
| 198x124 | 27,600 | 3 s brick | 48,200 | 7,500 | 2,500 | 85,800 |
| 109.8x265.6 | 5,000 | 2 s brick | 31,500 | 1,000 | 1,700 | 39,200 |

SCHEDULE F—

| SCHOOL. | Description of Lot. | Sub-Lot. | Lot. | Block. |
|--------------------------------------|---|---|--|--------|
| Audubon | N 175 ft of S 208 ft of W 264 ft of E 297 ft in Blk 30 in executors of W E Jones' Sub (except 20) of S E $\frac{1}{4}$ of Sec 19, 40, 14 | | | |
| Augustus H. Burley | S 133 ft N of Noble Av of the W 2 acres of the E 5 acres and the S 133 ft N of Noble Av of the W 2 acres of the E 7 acres of the N $\frac{1}{2}$ of the N E $\frac{1}{4}$ of the N E $\frac{1}{4}$ of Sec 30, 40, 14 | | | |
| Avondale | Hull's Sub of Blk 7 of Brand's Sub of N E $\frac{1}{4}$. Sec 26, 40, 13 | | 37 to 48 | 1 |
| Avondale Branch | Commencing at a point at the N line of the E $\frac{1}{2}$ of S E $\frac{1}{4}$ Sec 25, 40, 13, 33-100 chains W of N E cor, thence W 640-100 chains to center of the NW Plank rd thence S (50° E) along the center of said NW Plank rd to 492-100 chains, thence at right angles to said Plank rd 47-100 chains to the place of beginning | | | |
| Bancroft | Botsford's Sub of Blk 7 in Johnson's Sub of E $\frac{1}{2}$ of S W $\frac{1}{4}$ Sec 39, 40, 13 | | 4 to 12 | Sub 2 |
| Bass | Weddell & Cox's Sub of W $\frac{1}{2}$ N E $\frac{1}{4}$ Sec 20, 38, 14 | | 25 to 32 | 12 |
| Beale | Minnich's Sub of E 11 $\frac{1}{2}$ acres of S $\frac{1}{2}$ S $\frac{1}{2}$ N $\frac{1}{2}$ of S E $\frac{1}{4}$ Sec 17, 38, 14 | | 17 to 24 | 3 |
| Beaubien | Davenport's Sub of S $\frac{1}{2}$ of the N W $\frac{1}{4}$ of the N E $\frac{1}{4}$ and W $\frac{1}{2}$ of the N E $\frac{1}{4}$ of the N E $\frac{1}{4}$ of Sec 3, 39, 13 | | 335 to 342 | |
| Belle Plaine Avenue | Sam'l Brown Jr's Sub of Lots 2 and 3, in Blk 2 in Ogden's Sub | | 1 to 9 | |
| Bismarck | Jackson's Sub of Blks 7 and 8, in Hambleton's Sub of E $\frac{1}{2}$ of N W $\frac{1}{4}$ of Sec 35, 40, 13 | | { 49 to 53 E 9 feet of 54 & 91 to 96 } | 8 |
| Blaine | Lake View High School Sub in N W $\frac{1}{4}$ Sec 20, 40, 14; Oscar Charles' Add to Lane Park in N W $\frac{1}{4}$ Sec 20, 40, 14 | | { part of 16 & 119 to 128 } | 4 |
| aven | Calumet and Chicago Canal & Dock Co's Sub of parts of fractional Secs 6 and 6, 37, 15 | | { Catholic Chapel and 15 } | 84 |
| Bowmanville | Bowman's Sub of N $\frac{1}{2}$ of N W $\frac{1}{4}$ of S E $\frac{1}{4}$ Sec 12, 40, 13 | | 6 | |
| Bradwell | Second Div of Westphal's Sub in S $\frac{1}{2}$ Sec 30, 38, 15 | | 102, 104 S $\frac{1}{2}$ of 100 | |
| Brainard | Campbell's Sub E $\frac{1}{2}$ Blk 6, in Sec 19, 39, 14 | | 28 to 34 | 6 |
| Brainerd—Branch of Auburn Park | E L Brainerd's Sub of Blks 1, 2, 3, 4, 5, 6, 7, 8 and 11, in W O Cole's Sub of E $\frac{1}{2}$ N W $\frac{1}{4}$, except S E $\frac{1}{4}$ S E $\frac{1}{4}$ N W $\frac{1}{4}$ Sec 5, 37, 14 | | 18 to 20 | 6 |
| Brenan | Canal Trustees' Sub 29, 39, 14 | { 28, 31, 32, 35, 36, 39, 40, 43, 44, 47 and 48 } | Healey Bros. Sub of part 1 and 2 | { 24 } |
| Brentano | Harriet Farlin's Sub W $\frac{1}{2}$ S E $\frac{1}{4}$ Sec 25, 40, 13 | | 30 to 39 | 8 |
| Brighton | C T Sub E $\frac{1}{2}$ Sec 31, 39, 14 | W 267 ft | of E 300 ft | 24 |
| Brown | C T Sub Sec 7, 39, 14 | 7 to 12 | 2 | 63 |
| Brownell | Skinner & Judd's Sub of part of N E $\frac{1}{4}$ Sec 21, 38, 14 | | { 7 and N 25 ft of 6 } | 12 |
| Bryant | W E Merigold's Re-Sub of N 50 acres of E $\frac{1}{2}$ of N E $\frac{1}{4}$ of Sec 22, 39, 13 | | 27 to 37 | 6 |

Continued.

| Size of Lot. | Value of Lot. | Class of Buildings. | Value of Building. | Value of Heating Apparatus. | Value of Furniture, Libraries, etc. | Total Estimated Value of School Prop. |
|---------------------------------------|---------------|---------------------|--------------------|-----------------------------|-------------------------------------|---------------------------------------|
| 264x175 | \$ 8,340 | 3 s brick | \$57,100 | \$13,100 | \$ 2,500 | \$81,040 |
| 254.1x133 | 12,300 | 3 s brick | 76,000 | 9,690 | 3,000 | 100,990 |
| 297x123 | 7,430 | ..... | 34,950 | 6,200 | 1,500 | 50,080 |
| { Triangular 228.8x291.8x 189.2 | 7,000 | 2 s brick | 10,000 | 500 | 500 | 18,000 |
| | 8,600 | 3 s brick | 65,000 | 13,200 | 2,500 | 89,300 |
| | 223x125 | | | | | |
| 196.82x124.57 | 4,900 | 3 s brick | 64,100 | 10,000 | 3,000 | 82,000 |
| 298.5x125 | 11,400 | 3 s brick | 65,200 | 13,750 | 3,000 | 93,350 |
| 192x125.75 | 6,000 | 2 s frame | 8,050 | 675 | 500 | 15,225 |
| 225x124.16 | 6,750 | 2 s frame | 10,650 | 1,000 | 550 | 18,950 |
| 266.5x149.5 | 14,900 | 3 s brick | 65,425 | 9,700 | 3,000 | 93,025 |
| 250x166.26 | 12,500 | 3 s brick | 62,750 | 11,675 | 3,000 | 89,925 |
| 171.3x140 | 12,600 | 3 s brick | 69,000 | 4,500 | 3,000 | 89,100 |
| 120x324.85 | 3,500 | 2 s brick | 10,000 | 500 | 500 | 14,500 |
| 248.5x167 | 8,300 | 2 s brick | 20,500 | 1,500 | 1,200 | 76,200 |
| | | 3 s brick | 40,000 | 3,200 | 1,500 | |
| 175x124 | 8,750 | 3 s brick | 43,000 | 6,200 | 2,500 | 60,450 |
| 150x125 | 3,000 | 2 s brick | 15,000 | 1,390 | 700 | 20,090 |
| 275x109 | 13,750 | 3 s brick | 46,500 | 9,500 | 2,500 | 72,250 |
| 250x125.8 | 9,200 | 3 s brick | 63,500 | 13,000 | 3,000 | 88,700 |
| 267x134 | 12,765 | 3 s brick | 30,000 | 5,000 | 2,000 | 91,465 |
| | | 3 s brick | 34,500 | 6,200 | 1,000 | |
| 232.49x126.3 | 34,870 | 3 s brick | 32,500 | 9,500 | 2,000 | 126,970 |
| | | 3 s brick | 36,600 | 9,500 | 2,000 | |
| 174x180.3 | 15,660 | 2 s brick | 45,500 | 2,000 | 2,000 | 65,160 |
| 275x125 | 9,650 | 3 s brick | 32,200 | 8,200 | 1,200 | 51,250 |

SCHEDULE F—

| SCHOOL. | Description of Lot. | Sub-Lot. | Lot. | Block. |
|--|--|--------------|---|---------|
| Buckley | Sub of the S 667.75 ft of the 167 ft W and adjoining the E 50 acres of the N E ¼ Sec 6, 38, 14. | | 16 to 24 | |
| Burnside | Burnside, being a Sub of S E ¼ S E ¼ Sec 3, 37, 14, etc | | 1 to 5 | 7 |
| Burr | Sheffield's Addn. | | N E ¼ of | 25 |
| Burroughs | Thos. Kelley's Addn to Chicago. | | 1 to 8 | 2 |
| Calhoun | Lowther's Sub E ½ N E ¼ Sec 13, 39, 13. | | 19 to 28 | 4 |
| Calumet Avenue..... | CT Sub W ½ Sec 27, 39, 14..... | 1 and 2 of } | 7 to 10 and lots } 11 and 12 } E 213 ft of S part 6 } | 84 1 |
| Carpenter | Assessor's Div E ½ N W ¼ Sec 8, 39, 14. | | | |
| Carter | Wilson, Heald & Stebbing's Sub N W ¼ S W ¼ Sec 15, 38, 14. | | 10 and 11 | 5 |
| Central Park | D S Lee et al Sub S W ½ Sec 12, 39, 13 ... | 5 to 12 | S B 3 | 8 |
| Champlin | Same as Englewood High | | | |
| Charles W. Earle..... | Englewood on the Hill, a Sub of S. E. ¼ of S E ½ Sec 18, 38, 14 | | 40 to 48 19 to 24 | 3 4 |
| Chase | Lewis Grave's Sub..... | | | |
| Chicago Lawn..... | N E ¼ of Blk 11, less a strip of land on the south side of said N E ¼ of Blk 11, reserved for street purposes, in John F. Eberhard's Sub of N E ¼ Sec 23, 38, 13 | | | |
| Clarke | Division of Sec 19, 39, 14..... | | 20 to 30 | 16 |
| Colman | Prout & Colman's Re-Sub of E 19 acres of S 25 acres S E ¼ Sec 4, 38, 14 | | 22 to 29 and N 8 ft of 21 | 1 |
| Columbus | Sub of S ½ of Blk 7, Sufferin's Sub of S W ¼ Sec 6, 39, 14..... | | 38 to 46 | 7 |
| Cooper | Walker's Sub of Blks 33, 34, 47 and part of 48, C T Sub Sec 19, 39, 14..... | | 88 to 94 | 48 |
| Cornell..... | Cornell, being a Sub of the W ½ and the S E ¼ of Sec 26, 38, 14, except, etc | | 13 to 22 | 50 |
| Crawford | Crawford's Sub, Sec 27, 39, 13..... | | | N ½ 21 |
| Cummings..... | Cummings, being a Sub of the E ½ Sec 13, 37, 14 | | 6 to 13 | 14 |
| D. S. Wentworth | Piece of land in N ½ S E ¼ S E ¼ Sec 20, 38, 14, described by metes and bounds. | | | |
| David Swing | Sherman's Sub of Lot 22, in Hageman, Sperman & Schmidt's Sub of Lots 12 to 14, in Sub of Lot 1, Blk 45, C T's Sub in Sec 21, 39, 14..... | | 1 to 8 | |
| Deaf Mute..... | School Sec Add | | | |
| Dore | School Sec Add..... | | 17 to 20 37 to 48 | 6 2 |
| Douglas..... | Tyler's Sub in Sec 34, 39, 14 | | | |
| Drexel, Br. of Herman Raster..... | South Lynne, a Sub in N ½ Sec 19, 38, 14. | | 32 to 36 | 19 |
| Drummond..... | Sheffield Add in S E ¼ Sec 31, 40, 14 ... | | 12 to 21 | 33 |
| Dummy Junc. Br. of Alice L. Barnard... | Halsted St Add to Washington Heights | | 6, 7 and 8 | 43 |
| Dunning Br. of William Penn Nixon... | That part of S W ¼ Sec 20, 40, 13, described by metes and bounds | | | |
| Eighty-third St. Br. of Bradwell | A B Meeker's Add to Hyde Park, being a Sub in S E ¼ N E ¼ Sec 31, 38, 15 ... | | 19 | 6 |
| Ellen Mitchell..... | Canal Trustees' Sub Sec 7, 39, 14 | | 15 to 26 | 23 |
| Ellis Avenue | Cornell | | 24 to 29 | 4 |
| Elsdon Branch of Chicago Lawn..... | On north side of Archer av in W ½ N W ¼ Sec 11, 38, 13..... | | | |

Continued.

| Size of Lot. | Value of Lot. | Class of Buildings. | Value of Building. | Value of Heating Apparatus. | Value of Furniture, Libraries, etc. | Total Estimated Value of School Prop. |
|---------------|---------------|---------------------|--------------------|-----------------------------|-------------------------------------|---------------------------------------|
| 285x126 | \$ 8,550 | 2 s brick | \$ 18,500 | \$ 1,000 | \$ 1,200 | \$ 29,250 |
| 123x150x60.5 | 1,600 | 2 s wood | 2,500 | 100 | 400 | 4,600 |
| 298.65x299.30 | 22,000 | 3 s brick | 30,000 | 6,000 | 2,000 | 103,700 |
| 216.85x125 | 6,700 | 3 s brick | 36,500 | 5,200 | 2,000 | |
| 250x121 | 29,000 | 3 s brick | 61,750 | 13,700 | 2,500 | 84,650 |
| 146x177½ | 29,200 | 3 s brick | 40,500 | 7,000 | 2,500 | 79,000 |
| 213x205 | 30,750 | 3 s brick | 30,000 | 2,000 | 2,000 | 63,200 |
| 198x170 | 22,000 | 3 s brick | 51,100 | 12,000 | 1,500 | 153,350 |
| 209x150 | 16,720 | 4 s brick | 45,000 | 10,500 | 2,500 | |
| | | 2 s brick | 28,000 | 4,500 | 1,200 | 108,400 |
| | | 3 s brick | 41,500 | 9,400 | 1,800 | |
| | | 3 s brick | 40,500 | 7,000 | 2,500 | 66,720 |
| | | 3 s brick | 57,000 | 11,500 | 2,500 | 71,000 |
| 225x124.32 | 5,000 | 3 s brick | 38,530 | 5,830 | 1,500 | 50,860 |
| 264x200 | 11,000 | 3 s brick | 54,200 | 12,600 | 3,000 | 80,800 |
| 300x300 | 12,000 | 2 s brick | 4,580 | 500 | 500 | 17,580 |
| 264.3x144 | 35,700 | 2 & 3 s brick | 111,200 | 21,300 | 4,500 | 172,700 |
| 200x106 | 10,000 | 3 s brick | 48,200 | 6,000 | 2,500 | 66,700 |
| 216x124.83 | 15,120 | 3 s brick | 46,500 | 9,000 | 2,500 | 73,120 |
| 175x125 | 11,550 | 3 s brick | 43,500 | 6,100 | 2,500 | 63,650 |
| 253.26x125 | 8,260 | 2 s brick | 24,500 | 1,500 | 1,200 | 92,370 |
| 362x125 | 7,200 | 3 s brick | 49,310 | 5,800 | 1,800 | |
| | | 3 s brick | 25,000 | 2,300 | 1,000 | 35,500 |
| 200x125 | 2,800 | 2 s brick | 21,360 | 1,000 | 1,200 | 26,360 |
| 200x125 | 6,000 | 3 s brick | 109,600 | 10,980 | 4,400 | 130,980 |
| 192.32x123.32 | 27,000 | 3 s brick | 49,400 | 8,400 | 2,600 | 87,400 |
| 200x111 | 80,000 | 2 s wood | 500 | 50 | 300 | 850 |
| 300x125.45 | 60,000 | 4 s brick | 40,000 | 6,000 | 2,500 | 128,500 |
| | | 2 s brick | 76,700 | 19,380 | 4,200 | 160,280 |
| 122x125 | 2,500 | 2 s wood | 4,000 | 50 | 250 | 6,800 |
| 241.5x125 | 5,700 | 3 s brick | 62,800 | 13,900 | 3,000 | 85,400 |
| 150x156.25 | | | | | | |
| SS 134 N S | 1,000 | 2 s brick | 2,000 | 250 | 250 | 3,500 |
| 165x124.9 | 1,400 | 2 s frame | 6,450 | 750 | 600 | 9,200 |
| 265.52x148 | 7,950 | 2 s wood | 10,000 | 1,000 | 500 | 20,950 |
| | | 1 s wood | 1,200 | 50 | 250 | |
| 53,625 sq ft | 27,400 | 3 s brick | 40,000 | 7,000 | 2,500 | 156,200 |
| 161.7x125 | 6,900 | 3 s brick | 60,500 | 16,000 | 2,800 | |
| | | 2 s wood | 12,350 | 1,180 | 550 | 20,980 |
| One acre | 3,000 | 2 s wood | 3,600 | 25 | 450 | 7,075 |

SCHEDULE F—

| SCHOOL. | Description of Lot. | Sub-Lot. | Lot. | Block. |
|--|--|------------------------|---|--------|
| Elston Road Branch of Linne | H M Felsenthal's Add to Avondale, being a Sub of the N 85½ acres of S W ¼ Sec 24, 40, 13, lying S W of Elston av. | | 3 | |
| Emerald Avenue Br. of Auburn Park..... | Geo A Chamber's Sub of that part N ½ N ½ N W ¼ Sec 33, 38, 14, W of C R I & P R R | | 43 to 48 | 4 |
| Emerson | C C Robinson's Sub of Canal Trustees' Sub, Sec 7, 39, 14. | | E 7 ft of 21 and all of 22, 23, 24 | 47 |
| Everett | S J Walker's Sub in Sec 31, 39, 14, S of Illinois and Michigan Canal. | | 39 to 50 | 24 |
| Fallon | Superior Court Sub of W ½ N W ¼, Sec 4, 38, 14 | | E 124 ft of S 200 ft of 26 to 37 | 16 |
| Farragut | Kralovic & Kaspar Sub in Sec 26, 39, 13. | | 13 to 20 | 6 |
| Farren | Derby's Sub S W ¼ N W ¼ Sec 10, 38, 14. | | | 4 |
| Fernwood | S 117 ft of W 165 ft of Lot 6, and N 33 ft of W 165 ft of Lot 11 (except W 33 ft) School Trustees' Sub Sec 16, 37, 14. | | | |
| Fifty-fifth St. Br. of Shields..... | One acre of west end of N 10 acres of E ½ N E ¼ and Lot 6, Superior Court Partition, Sec 13, 38, 13. | | | |
| Forest Glen Br. of Irving Park | In Caldwell's Reserve on the N Branch of Chicago River, in Sec 4, 40, 13. | | Part of 2 | |
| Forest Hill Br. of Hermann Raster .. | S 10 rods of W 16 rods of S ½ Sec 30, 38, 14. | | | |
| Forrestville | Mechanics' Nat Bank Sub of Blk 2 and W ½ of Blk 1, Fowler's Sub of Lots 11 to 15 of Forrestville in Sec 3, 38, 14. | | 24 to 31 | 2 |
| Foster | CT Sub of N W ¼ Sec 21, 39, 14. | | 7 to 8 | 68 |
| Franklin | Wm B Ogden's Sub of Lots 170 and 171, in Bronson's Add. | 82, 82½, 83, 85 and 86 | | |
| Froebel | Bronson's Add in Sec 4, 39, 14. | | S ½ of 174, 175 | |
| Fulton | Hyman & Peter's Sub in Sec 19, 39, 14. | | 4 to 12 | 60 |
| Gallistel | Hedenberg's Sub N W ¼ S E ¼ S E ¼ Sec 7, 38, 14. | | 1 to 8 | 2 |
| Garfield | Iron Workers' Add to So Chicago, being a Sub of S frac ½ of Frac Sec 8, 37, 15 | | 25 to 32 | 14 |
| George Howland..... | Brand's Addition | | 10, 12, 14, 16, 18, 20, 22, 24, 26, 28 and 30 | 19 |
| George Thomas..... | Sherman & Walter's Re-Sub Blk 11, Circuit Court Par E ½ N E ¼ Sec 23, 39, 13. | | 1 to 8 | 11 |
| Geo. H. Thomas..... | Geo M High's Sub E ½ Blk 15, Sheffield's Add N W ¼ Sec 32, 40, 14. | | 35 to 38 | 4 |
| George William Curtis..... | E Stanwood's Sub in N W Sec 22, 37, 14. | | 36 to 40 | |
| Gladstone | E D L Wicke's Sub of Blk 4 in the Sub of Sec 19, 39, 14. | | 1 to 11 | 1 |
| Goethe | Gray's Sub of E 8 acres of W 33 acres of that part, being 106.82 acres lying N E of Plank road of N E ¼ Sec 36, 40, 13. | | 68 to 75 | |
| George Schneider.... | Morse's Sub of Lots 5, 6, 7 and 8 in Gray's Sub as above. | | 4 ex N 51 ft | |
| | Morse's Sub of Lots 5, 6, 7 and 8 in Gray's Sub | 1 to 5 | 5 to 8 | |
| | William Rahne's Sub of the N ½ of Lot 13 in Snow Est Sub by Superior Court Part of E ½ of N W ¼ of Sec 30, 40, 14. | | 41 to 48 | 2 |

Continued.

| Size of Lot. | Value of Lot. | Class of Buildings. | Value of Building. | Value of Heating Apparatus. | Value of Furniture, Libraries, etc. | Total Estimated Value of School Prop. |
|------------------------------------|---------------|----------------------------|----------------------|-----------------------------|-------------------------------------|---------------------------------------|
| { 103.5x74.5 126x124.2 } | \$ 3,500 | 1 s wood | \$ 1,500 | \$ 50 | \$ 150 | \$ 5,200 |
| 150x144.4 | 6,000 | 2 s brick | 17,300 | 1,300 | 900 | 25,500 |
| 157x119.4 | 14,900 | 3 s brick | 45,100 | 5,300 | 2,500 | 67,800 |
| 288x125 | 7,500 | 3 s brick | 65,700 | 15,540 | 3,000 | 91,740 |
| 200x124 | 8,000 | 3 s brick | 20,700 | 4,000 | 2,000 | 34,700 |
| 300x125 | 7,200 | 3 s brick | 60,500 | 13,100 | 3,000 | 83,800 |
| 199x160.3 | 20,000 | 3 s brick | 23,640 | 4,000 | 2,000 | 49,640 |
| 150x132 | 2,000 | 2 s wood | 4,000 | 100 | 500 | 6,600 |
| { 100x294.32 225x128.3 } | 8,400 | 2 s wood | 9,950 | 1,000 | 600 | 19,950 |
| { ¼ acre 99x109 } | 500 | 1 s wood | 500 | 20 | 80 | 1,100 |
| 204x132 | 2,540 | 1 s wood | 200 | 50 | 100 | 2,890 |
| 220.43x126.1 | 24,600 | 3 s brick | 85,400 | 19,200 | 3,500 | 132,700 |
| 200x173 | 21,600 | 3 s brick | 115,900 | 23,300 | 5,100 | 165,900 |
| { 220x150 22x150 225x126.6 } | 70,500 | 3 s brick | 121,650 | 16,000 | 4,550 | 212,700 |
| | 13,500 | 4 s brick | 52,000 | 8,200 | 3,000 | 76,700 |
| 200x125.5 | 4,230 | 3 s brick | 49,150 | 8,740 | 2,600 | 64,720 |
| 200x121.5 | 5,000 | { 2 s wood 2 s brick } | { 500 21,000 } | { 50 550 } | { 300 900 } | { 28,300 } |
| 261.35x99.5 | 15,800 | { 3 s brick 3 s brick } | { 38,500 37,500 } | { 6,500 6,500 } | { 2,000 2,000 } | { 108,800 } |
| 200x125 | 12,000 | 3 s brick | 64,700 | 12,800 | 3,000 | 92,500 |
| 100x128 | 8,960 | 3 s brick | 40,900 | 11,200 | 2,000 | 63,060 |
| 268x124.5 | 8,830 | 3 s brick | 62,460 | 13,600 | 2,700 | 87,590 |
| 192.53x124.24 | 16,000 | 3 s brick | 56,200 | 9,800 | 2,500 | 84,500 |
| 213x183.48 | 10,650 | 3 s brick | 64,800 | 11,500 | 3,300 | 90,250 |
| 200x124.73 | 8,375 | 3 s brick | 65,925 | 9,970 | 3,000 | 87,270 |

| SCHOOL. | Description of Lot. | Sub-Lot. | Lot. | Block. |
|--------------------------------------|---|--------------------------|---|--------|
| Goodrich | Gilpin's Sub of Blk 22, Canal Trustees' Sub Sec 17, 39, 14. | | 21 to 28 | |
| Graham | Sub S $\frac{1}{2}$ W $\frac{1}{2}$ S $\frac{1}{2}$ N $\frac{1}{2}$ S W $\frac{1}{4}$ Sec 4, 38, 14. | | 1 to 12 | 3 |
| Grant | Rockwell's Sub E $\frac{1}{2}$ N E $\frac{1}{4}$ Sec 13, 39, 13. | { 1 to 4 16, 17, 18 } | 11, 12 and 13 | 7 |
| Grayland Branch of Irving Park | In N W corner Sec 22, 40, 13, described by metes and bounds. | | | |
| Greeley | West 41 ft of S $\frac{1}{2}$ of S W $\frac{1}{4}$ of Blk 7 and Lot 3, in Stock's Sub of E $\frac{3}{4}$ of S W $\frac{1}{4}$ of Blk 7 of Lafin, Smith & Dyer's Sub. | | | |
| Greene | T M Jordan's Sub of Blk 21 in Canal Trustee's Sub of E $\frac{1}{2}$, Sec 31, 39, 14. | | 22 to 29 | Sub 2 |
| Greenwood Avenue | Sheldon's Sub of N 7-10 of N $\frac{1}{2}$ of Blk 8, in Sub by Executors of Elijah K Hubbard of E $\frac{1}{4}$ of S W $\frac{1}{4}$ Sec 2, 38, 14. | | 10 to 13 | |
| Gresham | Bellamy's Sub of N 40 acres of S 60 acres of E $\frac{1}{2}$ S E $\frac{1}{4}$, Sec 32, 38, 14. | | 1 to 9 | 7 |
| Hamilton | Turner's Re-sub in N E $\frac{1}{2}$ of E $\frac{1}{2}$ of S E $\frac{1}{4}$ of Sec 19, 40, 14. | | 22 to 35 | 2 |
| Hammond | Levi P Morton's Sub S E $\frac{1}{4}$ of S W $\frac{1}{4}$ Sec 24, 39, 13. | | 44 to 51 | 3 |
| Hancock | Swan's Sub of S 25 acres of S E $\frac{1}{4}$ Sec 4, 38, 14. | | 50 to 64 | 2 |
| Hanson Park Br. of Wm. Penn Nixon.. | W $\frac{1}{2}$ N W $\frac{1}{4}$ Sec 33, 40, 13, School Fund Property | | | |
| Harrison | Archer's Addition | | 5 to 11 | 6 |
| Hartigan | Wm F Day's Sub of N 13 rods of S 86 rods of E 124 rods of N E $\frac{1}{4}$ Sec 4, 38, 14, also. | | 9 to 11 | 2 |
| Harvard | Hubbard, Crocker & Stone's Sub. | | 16 | 2 |
| Haven | Stewart's Sub in Sec 28, 38, 14. | | 9 | 5 |
| Hawthorne | Assessor's Div N W $\frac{1}{4}$ Sec 22, 39, 14. | N 150 ft | 2 | 18 |
| Hayes | Baxter's Sub in S E $\frac{1}{4}$ of Sec 20, 40, 14. | | 18 to 31 | 2 |
| Headley | Canal Trustees' Sub in S W $\frac{1}{4}$ Sec 7, 39, 14 | 1 to 12 and 51 | 2 | 42 |
| Healy | Sub of Blk 13 in Sheffield's Addition. | | 41 to 48 | Sub 6 |
| Hedges | David Davis' Sub in S E $\frac{1}{4}$ of S W $\frac{1}{4}$ Sec 28, 29, 14. | | 11 to 19 | 8 |
| Hendricks | Winter's Re-sub of W $\frac{1}{2}$ of Block 10 of the Chicago University Sub of part Sec 7, 38, 14. | 12 to 23 | 26 to 50 | 10 |
| Henry Clay | Jackson Sub of the N 5 chains of S E $\frac{1}{4}$ Sec 4, 38, 14. | | 3 to 10 | 6 |
| Henry H. Nash | Hegewisch's Sub of S W $\frac{1}{4}$ N E $\frac{1}{4}$ and W 165.8 ft of the N 1152.3 ft of S E $\frac{1}{4}$ N E $\frac{1}{4}$ Sec 31, 37, 15. | | { S 11 ft of 17 and all of 18 to 24 } | { 9 } |
| Herman Raster | Hegewisch's First Add to Hegewisch in Sec 31 and 32, 37, 15. | | { S 11 ft of 17 and all of 18 to 24 } | { 4 } |
| Hermosa Branch of Wm. Penn Nixon.. | Re-sub of Blk 12 in George C Campbell's Sub of N E $\frac{1}{4}$ of N E $\frac{1}{4}$ Sec 9, 39, 13, and S $\frac{1}{2}$ of S E $\frac{1}{4}$ of S W $\frac{1}{4}$ Sec 4, 39, 13. | | 29 to 36 | |
| Hoerner | E O Lamphere's Add to Englewood in Sec 19, 38, 14. | | 25 to 32 | 8 |
| Holden | Garfield being a Sub of part of S E $\frac{1}{4}$ Sec 34, 40, 13. | | 1 to 4 | 4 |
| Holmes | Traver's Sub N W $\frac{1}{4}$ N W $\frac{1}{4}$ N E $\frac{1}{4}$ Sec 8, 38, 14. | | 43 to 45 | 1 |
| | 8 Frac Sec 29, 39, 14, Canal Trustees' Sub | | Part of 5 | 26 |
| | Eames' Sub of N E $\frac{1}{4}$ of N E $\frac{1}{4}$ Sec 17, 38, 14. | | { 11 to 19 and N 7 ft 20 } | { 4 } |

Continued.

| Size of Lot. | Value of Lot. | Class of Buildings. | Value of Buildings. | Value of Heating Apparatus. | Value of Furniture, Libraries, etc. | Total Estimated Value of School Prop. |
|----------------------|---------------|--|---------------------|-----------------------------|-------------------------------------|---------------------------------------|
| 214x100 | \$ 32,000 | 3 s brick | \$ 75,160 | \$ 21,000 | \$ 4,350 | \$ 132,510 |
| 300.75x124 | 21,000 | { 3 s brick 3 s brick | 45,400 20,000 | 9,000 4,000 | 2,000 2,000 | { 103,400 |
| 204x122 | 16,320 | 3 s brick | 48,700 | 7,000 | 2,500 | 74,520 |
| ½ acre | 5,000 | 2 s brick | 7,300 | 200 | 500 | 13,000 |
| 242.2x142 | 19,400 | 3 s brick | 54,770 | 12,700 | 2,500 | 89,370 |
| 200.5x125.15 | 9,100 | 3 s brick | 66,425 | 9,500 | 3,000 | 88,025 |
| 187.36x185 | 32,490 | 2 s brick | 62,100 | 14,900 | 2,500 | 111,990 |
| 225x126.6 | 4,500 | { 2 s brick 2 s brick | 11,000 34,060 | 500 5,630 | 500 1,300 | { 57,490 |
| 266x175 | 18,925 | 2 s brick | 37,400 | 2,500 | 2,500 | 61,325 |
| 200x125 | 5,200 | 3 s brick | 58,200 | 15,300 | 3,000 | 81,700 |
| 101.5x334.5 | 15,200 | { 3 s brick 2 s frame | 35,620 6,350 | 5,000 450 | 2,000 600 | { 65,220 |
| 175x125 | 11,375 | 2 s frame 3 s brick | 4,960 59,500 | 500 11,470 | 600 3,000 | 6,060 85,345 |
| 78x104 | 3,120 | { 3 s brick 2 s brick 4 s brick 2 s brick | 35,000 | 5,000 | 2,000 | 47,270 |
| 25.50x125 | 2,150 | | | | | |
| 100x160.6 | 5,000 | | | | | |
| 150x170 | 150,000 | | | | | |
| 263.3x159 | 18,430 | { 2 s brick 3 s brick | 36,500 34,800 | 7,000 11,550 | 3,200 1,300 | { 231,700 |
| 267x140 | 26,700 | 4 s brick | 40,000 | 6,000 | 2,500 | 75,200 |
| 195x125 | 20,000 | 3 s brick | 35,600 | 2,000 | 2,000 | 59,600 |
| 222.5x125.16 | 14,140 | { 3 s brick 3 s brick | 40,000 28,750 | 6,000 6,000 | 2,500 1,300 | { 98,690 |
| 124.66x308.5 | 7,700 | 2 s brick | 36,250 | 6,140 | 1,800 | 51,890 |
| 198x124 | 11,880 | 3 s brick | 32,500 | 4,500 | 2,500 | 51,380 |
| 264.77x185.62 | 17,500 | 2 s brick | 18,950 | 1,000 | 1,200 | 38,650 |
| 210x120.55 | 6,000 | 3 s brick | 68,180 | 10,265 | 3,300 | 87,745 |
| 200x124.7 | 3,600 | 3 s brick | 33,300 | 7,700 | 1,200 | 45,800 |
| 100x125 | 3,000 | 2 s wood | 2,700 | .50 | 250 | 6,000 |
| 72x125.9 | 1,875 | 2 s wood | 650 | 150 | 500 | 3,175 |
| { 273.8 190x330 } | 25,000 | { 4 s brick 3 s brick | 40,000 69,350 | 4,000 15,000 | 2,400 2,500 | { 158,250 |
| 232x124.67 | 10,440 | 3 s brick | 62,200 | 12,900 | 3,000 | 88,540 |

SCHEDULE F—

| SCHOOL. | Description of Lot. | Sub-Lot. | Lot. | Block. |
|---|---|------------------------------|--|--------------------|
| Horace Mann | John V Le Moyne's Sub in S E $\frac{1}{4}$ Sec 33, 39, 14 | | 54 to 61 | S $\frac{1}{2}$ 19 |
| Humboldt | Louis' Sub of Lots 6, 7 and 8, in S W part of Block 6 in Borden's Sub of W $\frac{1}{2}$ of S E $\frac{1}{4}$ Sec 36, 40, 13 | 10 to 14 | 6, 7 and 8 1 to 6 and 12 ft East of 1 | 6 13 |
| Huron Street | Butler, Wright & Webster's Add in N E $\frac{1}{4}$ Sec 9, 39, 14 | | | |
| Irving | Flournoy's re-Sub of Jones & Patrick's Add in S W $\frac{1}{4}$ Sec 18, 39, 14 | | 30 to 37 | 3 |
| Irving Park | Original Sub of Irving Park in Sec 22, 40, 13 | | 8, 9, 12, 13 and 16 | 37 |
| J. L. Marsh | Notre Dame Add to South Chicago being a Sub of S $\frac{1}{4}$ of Frac Sec 7, 37, 15. | | 30 to 46 | 16 |
| J. N. Thorp | Chicago & Calumet Canal & Dock Co.'s Add to South Chicago | | 42 to 46 | 37 |
| J. R. Doolittle, Jr. Jackson Pk. Branch of Ray | Ellis' West Add in S E $\frac{1}{4}$ Sec 34, 39, 14. } Ils Cent R R Sub of part of Frac S W $\frac{1}{4}$ of Sec 12 and part of Frac N W $\frac{1}{4}$ of Sec 13, 38, 14 | 8 to 15 & E 20 ft of 16 } | 1 to 2 | 4 |
| James W. Scott | Kimbarck's Add to Hyde Park in S E $\frac{1}{4}$ Sec 11, 38, 14 | | 20 | 1 |
| Jefferson | Canal Trustees' Sub W $\frac{1}{2}$ and W $\frac{1}{2}$ N E $\frac{1}{4}$ Sec 17, 39, 14 | | 21 to 24 | 28 |
| Jefferson Park | Village of Jefferson, according to a map of a re-Sub by DeLoss W Eldred, being in Secs 8, 9 and 16, T. 40, R. 13 | | 85 to 92 | 49 |
| John Crerar | John H Leather's Sub in S E $\frac{1}{4}$ Sec 13, 39, 13 | | 21 to 24 | 22 |
| John Ericsson | Reed's Sub of the E $\frac{1}{4}$ of the S $\frac{1}{4}$ of the N W $\frac{1}{4}$ Sec 13, 39, 13 | | 1 to 6 | 2 |
| John McLaren | Lafin & Loomis Sub N $\frac{1}{2}$ Blk 41, C T Sub W $\frac{1}{2}$ and W $\frac{1}{2}$, N E $\frac{1}{4}$, Sec 17, 39, 14 | | 33 to 41 | 5 |
| Jones | School Sec Add | | 47 to 52 26 to 32 | 41 136 |
| Keith | Hannah Busby's Sub of part of S W $\frac{1}{4}$, Blk 16, C T Sub Sec 33, 39, 14 | | 1 to 8 and N 8 ft of 9 | |
| Kelvyn Grove | Hayes' Sub in S W $\frac{1}{4}$ Sec 27, 40, 13 | | 16 to 23 | 28 |
| Kensington | Rees & Sawyer's Sub of Blk 12 of Kensington, Sec 27, 37, 14 | | 1 | |
| Kenwood | Erhart's Sub of 5 acres in N W cor of S W $\frac{1}{4}$, Sec 22, 37, 14 | | 6 | |
| Kershaw | Hyde Park in Sec 11, 38, 14 | | 8, 9 and 10 | 5 |
| King | Sub of W 35 acres of N 70 acres and S 90 acres, N W $\frac{1}{4}$ Sec 21, 38, 14, known as Linden Grove Sub | | S 58.83 ft of 6, all of 7 and 10, & N 72.17 of 11 | 7 |
| Kinzie | Rockwell's Add, N E $\frac{1}{4}$ Sec 13, 39, 13 | 2 to 9 | 22 and S $\frac{1}{2}$ 19 | 5 |
| Knickerbocker | Woolcott's Add, Sec 9, 39, 14 | | 1, 2, 3 | 20 |
| Komensky | Newberry's Add, Sec 9, 39, 14 | | 12, 13, 14 | 5 |
| Kosciusko | Chase & Williams' Sub in N $\frac{1}{4}$ Sec 32, 40, 14 | | 25 to 32 | 1 |
| La Fayette | Same as Longfellow | | 32 to 37 | 2 |
| Lake View, No. 5 | Chatfield's Add in S W $\frac{1}{4}$ Sec 5, 39, 14 | | 35 to 46 | 2 |
| Langland | Watriss' sub of S $\frac{1}{2}$ of N W $\frac{1}{4}$ of S E $\frac{1}{4}$ of Sec 1, 39, 13 | | | |
| | Strip 125 ft by 250 ft in S E corner Blk 48 in Ex'rs of W E Jones' Sub in Sec 19, 40, 14 | | | |
| | Pierce's Add to Holstein in S W $\frac{1}{4}$ Sec 31, 40, 14 | | 36 to 41 | 6 |

Continued.

| Size of Lot. | Value of Lot. | Class of Buildings. | Value of Building. | Value of Heating Apparatus. | Value of Furniture, Libraries, etc. | Total Estimated Value of School Prop. |
|---------------------|---------------|---------------------------------------|--------------------|-----------------------------|-------------------------------------|---------------------------------------|
| 192x125 | \$12,400 | 2 s brick | \$ 54,950 | \$15,350 | \$ 2,500 | \$ 85,200 |
| 130.88x125.25 | 6,000 | 3 s brick | 25,000 | 1,500 | 1,800 | 34,300 |
| 162x100 | 33,900 | 3 s brick | 35,000 | 4,500 | 1,800 | 75,200 |
| 192x125 | 14,400 | 3 s brick | 50,000 | 8,300 | 2,500 | 75,200 |
| 250x174 | 7,500 | 2 s brick | 12,000 | 700 | 1,000 | 21,200 |
| 203.58x138.5 | 4,000 | 2 s brick | 14,500 | 1,150 | 1,200 | 20,850 |
| 125x140 | 8,400 | } 2 s brick 3 s brick 3 s brick | 70,120 | 9,670 | 3,100 | 91,290 |
| 220x231 | 55,000 | | 40,000 | 6,000 | 2,500 | } 146,000 |
| | | | 37,000 | 4,500 | 1,600 | |
| 47x164 | 5,900 | 2 s brick | 16,000 | 1,000 | 600 | 23,500 |
| 193.12x166.64 | 25,000 | } 2 s brick 2 s frame | 20,500 | 2,000 | 1,200 | } 52,550 |
| | | | 3,250 | 300 | 300 | |
| 200.3x104.5 | 16,020 | 3 s brick | 48,500 | 5,940 | 2,500 | 72,960 |
| 100x125 | 3,000 | 3 s brick | 11,000 | 300 | 900 | 15,200 |
| 268.6x125 | 25,520 | 3 s brick | 62,100 | 13,900 | 2,500 | 104,020 |
| 225x154 | 17,640 | 3 s brick | 55,700 | 13,840 | 3,000 | 90,180 |
| 150x125 | 16,500 | 3 s brick | 55,720 | 11,550 | 3,000 | 86,770 |
| 175x100 | 219,430 | 4 s brick | 40,500 | 6,000 | 2,500 | 268,430 |
| 200x122.10 | 15,000 | 3 s brick | 51,000 | 10,500 | 2,500 | 79,000 |
| 175x125 | 2,600 | 2 s brick | 9,100 | 500 | 600 | 12,800 |
| 80x241.7 | } 6,700 | | | | | } 6,500 |
| 36.2x253 | | | | | | |
| 240x280.2 x133.6 | | | | | | |
| | 74,000 | 2 s stone | 34,500 | 4,500 | 1,500 | 114,500 |
| 281x134 | 17,630 | } 2 s brick 2 s brick | 54,000 | 12,300 | 1,800 | } 137,730 |
| | | | 46,500 | 2,500 | 3,000 | |
| 196x158 | 19,600 | 3 s brick | 56,000 | 7,635 | 3,000 | 86,235 |
| 191.1x100 | 54,750 | 3 s brick | 25,000 | 2,000 | 1,800 | 83,550 |
| 200x124 | 12,000 | 3 s brick | 62,250 | 13,200 | 3,000 | 90,450 |
| 122x125.5 | 12,200 | 3 s brick | 49,800 | 12,000 | 2,500 | 76,500 |
| 149x125 | 18,625 | 3 s brick | 35,000 | 2,000 | 1,800 | 57,425 |
| 306.26x124.68 | 12,250 | 3 s brick | 61,800 | 13,000 | 2,500 | 89,550 |
| 250x125 | 17,500 | 1 s wood | 3,000 | 200 | 300 | 21,000 |
| 144x100 | 5,760 | 3 s brick | 40,000 | 7,800 | 1,800 | 55,360 |

SCHEDULE F—

| SCHOOL. | Description of Lot. | Sub-Lot. | Lot. | Block. |
|---|--|------------|--|------------------|
| La Salle..... | North Add in Sec 33, 40, 14..... | 14 to 21 | { 35 to 37 and part of 34 } | ..... |
| Lawndale..... | Millard & Decker's Sub E ½ of E ½ of N W ¼ Sec 26, 39, 13..... | | 25 to 32 | 1 |
| Lewis..... | Same as Englewood High..... |  |  | ..... |
| Lilydale Branch of Burnside..... | In N W cor S W ¼ S W ¼ Sec 3, 37, 14..... |  |  | ..... |
| Lincoln..... | C T Sub E ½ Sec 33, 40, 14..... | | { 2 ex N 18 ft } | E ½ 6 |
| Linne..... | S E Gross' Unter den Linden Add, a Sub in S W ¼, Sec 24, 40, 13..... | | 29 to 37 | 10 |
| Logan..... | Sub W ½ N W ¼, Sec 31, 40, 14..... | | 25 to 33 | 6 |
| Longfellow..... | Stewart's Sub of Blk 9, Johnson & Lee's Sub, S W ¼, Sec 20, 39, 14..... | | 83 to 94 | ..... |
| Longwood Br. of Alice R. Barnard..... | Hilliard & Dobbins' 1st Add to Washing- ton Heights, a Sub of E ½ N E ¼ Sec 7 and N W ¼ Sec 8, 37, 14..... | | Part 1 and 2 | 6 |
| Louis Nettelhorst..... | E 1 acre N 122.76 ft Lot 30; also, except W 67 ft of Lot 1, in Gehrke & Brauck- man's Sub of N 122.76 ft Lot 30, Pine Grove; also H. M. Peters' Sub of part of Lot 30, Pine Grove..... | 1 to 5 | of 1 to 5 | ..... |
| Lowell..... | S E Gross' 7th Humboldt Park Add to Chicago in N E ¼, Sec 2, 39, 13..... | | 37 to 48 S 234 ft of 207 | ..... |
| Lyman Trumbull..... | Bronson's Add in Sec 4, 39, 14..... |  |  | ..... |
| Madison Ave..... | Shafer & Dolder's Add to Cornell, a Sub of W ½ S W ¼ S E ¼ N E ¼ Sec 26, 38, 14..... | | 31 to 42 | ..... |
| Manierre..... | W L Newberry's Sub of Blks 7 and 8 of State Bank of Ill., Sub of N E ¼ of N W ¼ Sec 4, 39, 14..... | | 12 to 18 21 | 7 1 |
| Manual Training..... | School Sec Add..... |  |  | ..... |
| Maplewood, Br. of Brentano..... | Harriet Farlin's Sub in Sec 25, 40, 13..... | | 44 to 48 | 1 |
| Marshall..... | Central Park 2d Add to Chicago..... | | 23 to 33 | 2 |
| Mark Sheridan..... | Davis' Sub of N ½ of E ½ of S W ¼ Sec 28, 39, 14..... | | 8 to 15 | 4 |
| Marquette..... | Also..... | 1, 2 and 3 | of 16 to 19 1 to 12 | 24 |
| McAllister..... | Gage and others' Sub E ½ S E ¼ Sec 32, 39, 14..... |  |  | ..... |
| McClellan..... | C T Sub S W ¼ Sec 33, 39, 14..... | | 8 to 15 N 200 ft of W 125 ft 41 | 8 22 Sb B2 |
| McCosh..... | B Shurtleff's Sub N ½ Block 22..... |  |  | ..... |
| McCosh..... | Oakwoods, a Sub of N ½ of S ½ of N E ¼ Sec 22, 38, 14..... | | 30 to 38 3 to 6 | 6 2 |
| McPherson..... | Ravenswood..... |  |  | ..... |
| Medill..... | Sampson & Green's Add in N W ¼ Sec 20, 39, 14..... | | 34 to 42 | 10 |
| Melville W. Fuller..... | Wing & Farlin's Sub of that part of N ½ of S ½ of S W ¼ of N E ¼ of Sec 3, 38, 14, lying E of Vincennes road..... | | 1 to 8 | ..... |
| Mont Clare Branch of Wm. Penn Nixon..... | Hillside, a Sub of E ¼ of S ½ of W ½ and W ½ of S ½ of E ½ Sec 31, 40, 13..... | | 1 to 4 | 1 |
| Montefiore..... | Ogden's Add in N E ¼ Sec 8, 39, 14..... | | 12 to 16 | 14 |
| Montrose Branch of Irving Park..... | Hicox & Fitch's Sub in N E ¼ Sec 15, 40, 13..... | | part of 11 | ..... |
| Moreland Branch of Henry H. Nash..... | West Chicago Land Co's Sub N W ¼ of N W ¼ Sec 10, 39, 13..... | | 31 to 36 | 7 |

Continued.

| Size of Lot. | Value of Lot. | Class of Buildings. | Value of Building. | Value of Heating Apparatus. | Value of Furniture, Libraries, etc. | Total Estimated Value of School Prop. |
|-----------------------------------|---------------|--------------------------|--------------------|-----------------------------|-------------------------------------|---------------------------------------|
| 200x125.5 | \$20,000 | 3 s brick | \$71,800 | \$15,000 | \$3,500 | \$110,300 |
| 200x124.87 | 10,000 | 2 s brick 3 s brick | 30,000 32,200 | 1,000 2,000 | 1,200 1,800 | 42,200 36,000 |
| 100x220 | 1,800 | 1 s wood | 400 | 20 | 80 | 2,300 |
| 132.5x297 | 41,375 | 3 s brick 3 s brick | 40,000 34,650 | 6,000 7,060 | 3,000 1,500 | 133,585 |
| 216x125.7 | 5,400 | 2 s brick | 28,000 | 5,875 | 1,200 | 40,475 |
| 216x100 | 7,560 | 3 s brick | 48,000 | 11,500 | 2,560 | 69,560 |
| 160x125.5 | 16,000 | 3 s brick | 44,500 | 7,600 | 2,100 | 70,200 |
| 200x225 | 7,000 | 1 s brick | 3,000 | 300 | 500 | 10,800 |
| { 354.72x89.76 } { 125x116.4 } | 50,700 | { 3 s brick 2 s brick | 59,150 3,800 | 13,450 2,000 | 2,800 600 | { 132,500 |
| 299.6x123.9 | 9,000 | 3 s brick | 62,120 | 12,580 | 3,000 | 86,700 |
| 264x181.5 | S Fund Prop | { 3 s brick 3 s brick | 30,000 35,000 | 6,000 6,000 | 2,500 2,800 | { 82,300 |
| 300x125 | 12,000 | 2 s brick | 41,670 | 2,000 | 1,800 | 57,470 |
| 175x124.1 | 19,250 | 3 s brick 3 s brick | 48,440 53,000 | 8,885 4,000 | 3,000 33,645 | 79,575 90,645 |
| 117 5x125 | 5,335 | 2 s brick | 6,000 | 400 | 600 | 12,335 |
| 275.5x182.7 | 32,200 | 3 s brick | 69,035 | 12,900 | 4,700 | 118,835 |
| { 200x124.9 } { 75x100 } | 18,000 | 3 s brick | 40,000 | 7,000 | 2,500 | 67,500 |
| 289x125.87 | 35,575 | { 3 s brick 3 s brick | 45,000 60,000 | 7,000 15,000 | 2,500 2,500 | { 167,575 |
| 200x147 | 5,700 | 2 s brick | 51,800 | 11,440 | 3,000 | 71,940 |
| { 224x125 } | 19,000 | { 3 s brick 3 s brick | 40,000 36,000 | 7,000 8,540 | 2,500 1,350 | { 114,390 |
| 216.25x121.85 | 13,120 | 3 s brick | 59,900 | 10,100 | 3,000 | 86,120 |
| 200x152.5 | 12,000 | 3 s brick | 43,000 | 12,500 | 2,500 | 70,400 |
| 216.54x124 | 25,100 | 3 s brick | 76,740 | 12,850 | 5,000 | 119,690 |
| 205.25x126 | 22,600 | { 2 s brick 2 s brick | 4,400 38,500 | 100 5,750 | 500 1,800 | { 73,650 |
| 198.91x200.32 | 1,600 | 2 s wood | 8,315 | 610 | 600 | 11,125 |
| 200x116.1 | 30,000 | { 3 s brick 3 s brick | 27,500 38,000 | 4,000 2,000 | 1,300 1,800 | { 104,600 |
| 209.22x208.56 | 3,350 | 2 s brick | 6,500 | 200 | 400 | 10,450 |
| 150x120.85 | 3,300 | 2 s brick | 5,400 | 100 | 300 | 9,100 |

SCHEDULE F—

| SCHOOL. | Description of Lot. | Sub-Lot. | Lot. | Block. |
|---|---|----------|---|--------------|
| Morris | Lockwood's Sub in Sec 29, 40, 14 | 1 to 4 | 15 | } 4 |
| | Mitchell's Sub in Sec 29, 40, 14 | 2 and 13 | 12 | |
| Moseley | Canal Trustees' Sub Sec 27, 39, 14 | | | E ½ 34 |
| Motley | Taylor's Sub of Blk 1 of Assessor's Div E ½ N W ¼ Sec 8, 39, 14 | | 10 to 17 | 4 |
| Mowry Avenue Br. of Chicago Lawn | John F Eberhart's Sub S W ¼ Sec 14, 38, 13 | | 41 to 48 S B 4 | 5 5 |
| Mulligan | Sub of Blk 5, Sheffield's Add | 27 to 34 | E 200 ft of 17 S 49½ ft of 18 | } 2 |
| Newberry | Sheffield's Add in S W ¼ Sec 33, 40, 14 | | | |
| Ninety-second St. Br. of Auburn Park | Brouse's Sub of the N 40 acres of S 95 acres of W 110 acres of S W ¼ Sec 4, 37, 14 E | | 12 to 16 | 3 |
| Normal School | Parcel of land in S W ¼ and S E ¼ Sec 21, 38, 14 | | | } 23 |
| Norwood Park | Norwood Park | | 5 to 8 | |
| Norwood Park Br. | Described by metes and bounds | | | |
| Nutt Avenue Branch of Madison Av | Cornell | | 18 to 23 | 106 |
| Oakdale Branch of Auburn Park | Sisson & Newman's Sub of South Engle- wood, in N W ¼ Sec 4, 37, 14 | | 4 and 5 | 11 |
| Oakland | James Hood's Sub. Blks 15 and 16 of Cleaversville, in N frac ½ Sec 2, 38, 14 | | 1 and 2 | 15 |
| Oakley Avenue Br. of Shields | One acre in S W cor of Blk 34, Stone & Whitney's Sub of N W ¼ Sec 7, 38, 14 | | | |
| Oak Ridge | Jennings' Sub of part of Jennings & Maffett's Sub of S 60 acres of E ½ S W ¼ Sec 10, 38, 14 | | 19 to 22 20 to 26 1 | 2 14 1 |
| Oak Street | Rogers' Sub Sec 4, 39, 14 | | 20 to 27 | } 2 |
| Orden | Bushnell's Add in Sec 4, 39, 14 | | 3 and W 11¼ ft of 2 | |
| O'Toole | Kay's Sub. E ½ N ¼ N W ¼ Sec 8, 38, 14, N 208 ft of W 208 ft of N E ¼ N W ¼ Sec 9, 38, 14, also in Channing Sweet's Sub. | | | |
| Parkman | Johnson & Clement's Sub of W ½ S E ¼ Sec 22, 38, 14 | | 15 to 24 | 13 |
| Parkside | Ande Matteson's Sub of S part of N ½ S W ¼ S W ¼ Sec 24, 38, 14 | | 1 to 7 S 200 ft of 11 | E ½ 2 6 |
| Parkside Branch | Stave & Klemm's Sub in Sec 25, 38, 14 | | | |
| Peabody | McFagg's Sub of Outlot 19 in Canal Trustees' Sub of part of W ½ Sec 5, 39, 14 | | 30 to 37 | 2 |
| Phil Sheridan | Calumet and Chicago Canal and Dock Sub in Secs 5 and 6, 37, 15 | | 33 to 45 | 52 |
| Pickard | S A Goodwin's Sub in Sec 19, 39, 14 | | 1 to 8 | S ½ 57 |
| Polk Street | School Sec Add S W Rawson's Sub | | 42 to 47 | 17 |
| Prescott | E 299 ft of S 183 ft of N E ¼ S E ¼ Sec 30, 40, 14 | | | |
| Pulaski | Holstein, a Sub in Sec 31, 40, 14 | | 25 to 33 | 18 |
| Ravenswood | Ravenswood, a Sub of part of N E ¼ and N E ¼ of S E ¼, Sec 18 and part of Sec 17, 40, 14 | | 1 to 6 | 25 |
| Ray | Hopkins' Add to Hyde Park in W ½ N E ¼ Sec 14, 38, 14 | | 13 to 16 | 64 |
| Ray Br. of Cummings | West bank of Calumet River and a part of W frac S E ¼ S W ¼ Sec 19, 37, 15 | | | |
| Raymond | Freeman's Add in Sec 34, 39, 14 | | 27 to 32 and W ½ of 26, 23 and 24 | } B 2 |
| Richard Yates | Elijah Smith's Sub in Sec 34, 39, 14 | | | |
| | Hansbrough & Hess' Sub of E ½ S W ¼ Sec 36, 40, 13 | | 17 to 22 | 6 |

Continued.

| Size of Lot. | Value of Lot. | Class of Buildings. | Value of Building. | Value of Heating Apparatus. | Value of Furniture, Libraries, etc. | Total Estimated Value of School Prop. |
|---------------------------------------|---------------|--------------------------|--------------------|-----------------------------|-------------------------------------|---------------------------------------|
| 187.24x132.3 | \$ 30,500 | 3 s brick | \$ 67,480 | \$ 9,670 | \$ 3,000 | \$ 110,650 |
| 200x179 | 120,000 | { 3 s brick 3 s brick | 30,000 35,200 | 4,500 5,000 | 1,800 1,800 | 198,300 |
| 192x100 | 14,400 | 3 s brick | 47,800 | 5,900 | 2,500 | 70,600 |
| 124.8x203.5 | 4,500 | 2 s frame | 8,200 | 675 | 600 | 13,975 |
| 192x125 | 10,560 | 3 s brick | 54,500 | 13,500 | 3,000 | 81,560 |
| 200x148.5 | 22,000 | { 3 s brick 4 s brick | 34,200 44,000 | 5,600 6,000 | 1,300 3,500 | 116,600 |
| 124x125 { 691x1363.95 1156.71 } | 1,860 | 2 s brick | 8,600 | 150 | 400 | 11,010 |
| 261.9x223.3 | 3,000 | 2 s brick | 12,200 | 900 | 600 | 16,700 |
| 0.35 of an acre | 750 | 1 s brick | 1,200 | 25 | 125 | 2,100 |
| 161.43x126 | 4,840 | 2 s wood | 8,200 | 675 | 500 | 14,215 |
| 225x132.6 | 4,500 | 2 s wood | 500 | 50 | 350 | 5,400 |
| 150x150 | 50,000 | 3 s brick | 28,500 | 1,500 | 1,800 | 81,800 |
| 231x132 | 6,930 | 2 s wood | 1,300 | 50 | 300 | 8,580 |
| 200x179.75 | 20,000 | 3 s brick | 40,170 | 2,545 | 1,800 | 64,515 |
| 168½x100 | 17,500 | 3 s brick | 35,000 | 4,500 | 1,800 | 58,800 |
| 178½x106½ | 35,000 | 3 s brick | 57,540 | 11,500 | 3,000 | 107,040 |
| 192x124.3 | 8,500 | 2 s brick | 31,500 | 1,500 | 1,800 | 43,300 |
| 215.1x161.7 | 15,050 | { 3 s brick 2 s brick | 22,400 39,300 | 1,500 4,500 | 1,200 1,800 | 85,750 |
| 250x125 | 10,000 | 2 s brick | 28,300 | 1,500 | 1,200 | 41,000 |
| 162.53x189 | 9,720 | 2 s brick | 43,700 | 5,650 | 1,800 | 60,870 |
| 200x115.58 | 11,100 | 2 s wood | 4,700 | 260 | 300 | 16,360 |
| 192x124.3 | 27,000 | 3 s brick | 47,100 | 10,900 | 2,800 | 87,800 |
| 330x138.5 | 21,560 | { 2 s brick 3 s brick | 41,000 55,600 | 1,700 8,095 | 1,800 1,500 | 131,255 |
| 199.5x125 | 10,800 | 3 s brick | 64,440 | 9,891 | 3,150 | 88,280 |
| 150.5x120 | 37,625 | 3 s brick | 30,000 | 1,500 | 1,800 | 70,925 |
| 266x175 | 19,950 | 2 s brick | 25,730 | 1,500 | 2,000 | 49,180 |
| 216x100 | 8,550 | 3 s brick | 54,865 | 8,025 | 2,700 | 74,140 |
| 292.5x165 | 18,050 | { 2 s brick 3 s brick | 31,000 49,600 | 2,000 10,600 | 1,200 1,800 | 114,250 |
| 200x175 | 35,895 | 3 s brick | 46,225 | 9,000 | 2,500 | 93,620 |
| 75x175 | 750 | 1 s wood | 2,000 | 50 | 150 | 2,950 |
| { 132x162.8 50x174.8 } | 27,300 | { 3 s brick 3 s brick | 35,200 31,500 | 6,000 7,500 | 1,800 1,300 | 110,600 |
| 300x120 | 8,050 | 3 s brick | 89,130 | 10,830 | 3,000 | 111,010 |

SCHEDULE F—

| SCHOOL. | Description of Lot. | Sub-Lot. | Lot. | Block. |
|--------------------------------------|---|----------|---|---------|
| Riverdale | N W point of Lot 3 in Jones' Sub of that portion of S W frac $\frac{1}{4}$ Sec 34, 37, 14, S of Michigan City rd, and N W 40 ft of Lot 3..... | | | |
| Rogers | Sampson & Green's Add in N W $\frac{1}{4}$ Sec 20, 34, 14..... | | 13 to 19 | 8 |
| Rogers Park | Rogers Park in Sec 32, 41, 14..... | | 7 to 10 | 28 |
| Rogers Park Br | Rogers Park in Sec 32, 41, 14..... | | 11 to 14 | 23 |
| Rose Hill | Rose Hill Cemetery Co's Sub of S E $\frac{1}{4}$ N E $\frac{1}{4}$ Sec 6, 40, 14..... | | N 165.35 of E 200 ft of 3 | |
| Roseland Br. of Van Vliissingen..... | Assessor's Div W $\frac{1}{2}$ N W $\frac{1}{4}$ and W $\frac{1}{2}$ S W $\frac{1}{4}$ Sec 15, 37, 14..... | | 2 | |
| Ryerson | Morton Sub E $\frac{1}{2}$ N W $\frac{1}{4}$ Sec 11, 39, 13..... | | 1 to 8 | Subof 6 |
| Scammon | Duncan's Addn in Sec 17, 39, 14..... | | 14 to 16 | 7 |
| Scanlan | Field's Addn to Pulman in the E $\frac{1}{2}$ S E $\frac{1}{4}$ Sec 21, 37, 14..... | | 15 to 23 | 6 |
| Schiller | Butterfield's Add in Sec 4, 39, 14..... | | Pt. 81, 83 & 85 | |
| Seward | Schlessinger's Sub S W $\frac{1}{4}$ S E $\frac{1}{4}$ S E $\frac{1}{4}$ Sec 6, 38, 14..... | | 1 to 10 | 2 |
| Sheldon | Assessor's Div of N 200 ft of Blk 17, Bushnell's Add in Sec 4, 39, 14..... | | 6 | 17 |
| Sherman | Plowden Stevens' re-Sub of Lots 1 to 10 and 31 to 37 of Hincley's Sub of N W $\frac{1}{4}$ S E $\frac{1}{4}$, Sec 8, 38, 14..... | | 11 to 20 | 1 |
| Sherwood | S T Sub Sec 16, 38, 14..... | | W $\frac{1}{2}$ E $\frac{1}{2}$ S $\frac{1}{2}$ of 25 | |
| Shields | East 2 acres of S 8 $\frac{1}{2}$ acres of W $\frac{1}{2}$ N E $\frac{1}{4}$ Sec 1, 38, 13..... | | | |
| Skinner | Canal Trustees' Sub W $\frac{1}{2}$, etc., Sec 17, 39, 14..... | | 7 | 14 |
| Springer | Samuel Wing's Re-Sub of Blk 4 in Pryor & Hopkins' Sub of W $\frac{1}{2}$ N W $\frac{1}{4}$ Sec 3, 38, 14..... | | 19 to 23 | |
| Stony Island Avenue. | S 150 ft of N 190 ft of E 125 ft of W 225 ft of S W $\frac{1}{4}$ of S W $\frac{1}{4}$ of Sec 1, 37, 14..... | | | |
| Sumner | William Hale Thompson's Sub in Sec 15, 39, 13..... | | 20 to 30 | 2 |
| Talcott | C T Sub Sec 7, 39, 14..... | | 6 to 84 | 14 |
| Taylor | Re-Sub of that part of Taylor's 1st Add to So Chicago, lying E of W 20 chains in N Frac $\frac{1}{2}$ Sec 8, 37, 15..... | | 42 to 45 | 18 |
| Tennyson | Graydon & Lawson's Sub of Block 1, in David S Lee and others' Sub of S W $\frac{1}{4}$ Sec 12, 39, 13..... | | 1 to 10 | 1 |
| Thomas Chalmers..... | Cook & Anderson's Sub of W $\frac{1}{2}$ of N E $\frac{1}{4}$ Sec 24, 39, 13..... | | 6 to 8 | 2 |
| Thomas Hoyne | Kinzie's Addition in Sec 10, 39, 14..... | | N $\frac{1}{2}$ of 4, 5 and 6 | 11 |
| Throop | Johnson & Lee's Sub S W $\frac{1}{4}$ Sec 20, 39, 14..... | | 86 to 93 | 8 |
| Tilden | Magie & High's Add in Sec 8, 39, 14..... | | 17 to 24 | 2 |
| Tilton | Sub S $\frac{1}{2}$ Sec 10, 39, 13..... | | 17 to 24 | 13 |
| Van Vliissingen..... | George Mason's Add to Pullman in Sec 16, 37, 14..... | | 38 to 48 | |
| Victor F. Lawson | D. Goodwin's Sub of N W $\frac{1}{4}$ N E $\frac{1}{4}$ Sec 23, 39, 13..... | 8 to 14 | 1 to 6 and 43 to 48 41 and 42 | 4 |
| Von Humboldt | H M Thompson's Sub N W $\frac{1}{4}$ of N E $\frac{1}{4}$ of Sec 1, 39, 13..... | | 17 to 32 | 8 |
| Walsh | Walsh & McMullen's Sub S $\frac{1}{4}$ of S E $\frac{1}{4}$ Sec 20, 39, 14..... | | 9 to 20 | 16 |
| Walter Scott | Robertson's Sub in N E $\frac{1}{4}$ Sec 23, 38, 14..... | | 58, 63 and 64 | |

Continued.

| Size of Lot. | Value of Lot. | Class of Buildings. | Value of Building. | Value of Heating Apparatus. | Val'e of Furniture, Libraries, etc. | Total Estimated Value of School Prop. |
|------------------------------------|---------------|----------------------------|----------------------|-----------------------------|-------------------------------------|---------------------------------------|
| { Triangle 220x220x316 } | \$ 2,500 | 2 s brick | \$ 6,300 | \$ 200 | \$ 600 | \$ 9,600 |
| 175x124 | 10,000 | 3 s brick | 35,000 | 4,500 | 1,800 | 51,300 |
| 220.5x175 | 8,160 | 2 s brick | 11,560 | 1,200 | 700 | 21,620 |
| 200x172 | 7,850 | 2 s brick | 6,200 | 500 | 600 | 15,150 |
| 200x163.35 | 4,900 | 2 s brick | 7,000 | 2,000 | 500 | 14,400 |
| { Irregular 100x117x132 } | 1,750 | 2 s wood | 1,400 | 300 | 300 | 3,750 |
| 200x125.36 | 4,400 | 2 s brick | 58,075 | 13,600 | 2,800 | 78,875 |
| 150x118 | 30,000 | 3 s brick | 40,000 | 7,000 | 2,500 | 79,500 |
| 225x120.5 | 4,500 | 2 s brick | 23,840 | 800 | 1,000 | 30,140 |
| 153½x196.82 | 15,350 | { 3 s brick 3 s brick } | { 30,000 38,700 } | 14,200 | 3,300 | 101,550 |
| 242.5x124.7 | 9,270 | 3 s brick | 56,675 | 12,560 | 3,000 | 81,505 |
| 150x200 | 60,500 | 3 s brick | 34,000 | 1,800 | 1,500 | 97,800 |
| 250x124 | 10,000 | { 3 s brick 2 s brick } | { 31,885 20,580 } | { 4,500 1,500 } | { 1,800 1,200 } | 71,465 |
| 261.75x168 | 10,000 | { 2 s brick 2 s brick } | { 49,800 40,000 } | { 5,230 9,500 } | { 2,000 1,500 } | 118,030 |
| 287.32x247.52 | 8,000 | 2 s wood | 8,000 | 200 | 750 | 16,950 |
| 145x189 | 47,125 | 4 s brick | 40,000 | 7,000 | 3,500 | 97,625 |
| 142.75x160.6 | 24,000 | 2 s brick | 20,000 | 1,500 | 1,800 | 47,300 |
| 150x125 | 4,500 | 2 s wood | 6,600 | 200 | 500 | 11,800 |
| 275x125.82 | 11,000 | 3 s brick | 62,425 | 12,975 | 2,500 | 88,900 |
| 216x123.7 | 12,000 | { 3 s brick 3 s brick } | { 30,000 32,600 } | 5,610 | { 1,800 1,200 } | 83,210 |
| 100x125 | 4,000 | { 2 s brick 2 s brick } | { 16,000 26,900 } | 4,800 | { 600 1,200 } | 53,500 |
| 255.6x150 | 11,500 | 3 s brick | 56,580 | 9,200 | 3,000 | 80,280 |
| 280.5x151.8 | 15,425 | 3 s brick | 53,425 | 9,300 | 3,000 | 81,150 |
| 109x150 | 75,000 | 3 s brick | 45,000 | 7,000 | 2,500 | 129,500 |
| 198x125 | 19,800 | 3 s brick | 41,300 | 6,000 | 2,500 | 69,600 |
| 206.6x164.75 | 31,000 | 2 s brick | 50,000 | 10,000 | 2,500 | 93,500 |
| 205.8x228.7 | 22,500 | 3 s brick | 35,500 | 5,000 | 2,250 | 65,250 |
| 275x124.95 | 9,000 | 3 s brick | 63,850 | 14,570 | 2,500 | 89,920 |
| 200x149.6 | 11,500 | 3 s brick | 74,780 | 10,120 | 3,000 | 99,400 |
| 195.7x266 | 17,595 | 3 s brick | 112,705 | 17,080 | 5,500 | 152,880 |
| { 268.5x239 W S 268.5x91.12ES } | 32,550 | { 3 s brick 3 s brick } | { 35,000 46,000 } | { 8,000 10,000 } | { 1,800 2,500 } | 135,850 |
| 150x190 | 30,000 | 3 s brick | 52,545 | 8,440 | 2,500 | 93,485 |

| SCHOOL. | Description of Lot. | Sub-Lot. | Lot. | Block. |
|--|--|--|---|-------------------|
| Ward | U S Bank Add in Sec 28, 39, 14 | { N 75 of Lot 11, 12 to 15 } | 11 and 12 | 4 |
| Washburne | CT Sub N W $\frac{1}{4}$ Sec 21, 39, 14 | | 5 and 6 | 56 |
| Washington | Ogden's Add in N E $\frac{1}{4}$ Sec 8, 39, 14 | N 17 ft 8 and | 3 to 7 | 29 |
| W. C. Goudy | Argyle, a Sub in S E $\frac{1}{4}$ Sec 8, 40, 14 | | 11 to 14 | 1 |
| Waubansia Avenue Br. of Lowell | J G Wetmore's Sub of Blk 16 and W $\frac{1}{4}$ Blk 15, in Simon's Sub S E $\frac{1}{4}$ Sec 35, 40, 13 | | 19 to 24 | |
| Webster | CT Sub, known as Quarantine Grounds, Sec 33, 39, 14 | | | { Part of 15 } |
| Wells | Johnson's Sub in Sec 6, 39, 14 | | 10 to 16 | 16 |
| West Pullman | West Pullman, a Sub in N W $\frac{1}{4}$ and W $\frac{1}{2}$ of N E $\frac{1}{4}$ Sec 28, 37, 14 | | 24 to 34 | 7 |
| Whittier | Samuel J Walker's Dock Add | | 88 to 96 | 4 |
| Wicker Park | D S Lee's Add in N W $\frac{1}{4}$ Sec 6, 39, 14 | | 17 to 24 | 11 |
| William Penn Nixon | In Sub W $\frac{1}{2}$ S E $\frac{1}{4}$ N E $\frac{1}{4}$ Sec 34, 40, 13 | | 21 to 30 | 2 |
| Woodlawn | Second Plat of Woodlawn, a Sub of the E 22 acres N $\frac{1}{2}$, N W $\frac{1}{4}$ Sec 23, 38, 14 | | 3 to 5 | 3 |
| Worthy | House of Correction Grounds | | | |
| Yale | Normal Park Sub of W $\frac{1}{2}$ S E $\frac{1}{4}$ Sec 21, 38, 14 | | N 49, 2 ft of 2 & 11, all 1 and 12 } | 18 |
| *Carpenter Shop | School Section Add | | 21 | 1 |
| *Supply Room | School Section Add | | | |
| <i>Vacant Property.</i> | | | | |
| +Daly and Thirty- sixth streets. } | Original Town of Brighton, Sec 36, 39, 13 | { 59 to 63, ex E 27, 51 ft & all of 102 to 106 } | 1 to 20 | |
| +Carpenter St Lot | W E Cole's Sub in N E $\frac{1}{4}$ Sec 5, 37, 14 | | 12 to 15 | 3 |
| +Armitage Ave Lot | Lyford & Mann's Add to Cragin in S E $\frac{1}{4}$ Sec 33, 40, 13 | | 4 to 12 | 2 |
| +Winthrop Ave Lot | Cochran's Add to Edgewater in Sec 5, 40, 14 | | 1 to 5 | 3 |
| +S Elizabeth St Lot | McCauley's Sub of part of Blk 26, in Washington Heights | | 50 to 51 | |
| +Martin St Lot | Hillyard & Hitt's Sub of Blk 7, Wash- ington Heights | | 14 | 2 |
| +Warren Ave Lot | Pollock's Sub 4 acres S $\frac{1}{4}$ S E $\frac{1}{4}$ Sec 12- 39, 13 | | { E 23 ft of 18 and all of 19 to 21 } | 1 |
| +Thirty-third Place Lot | Brown's Add to Chicago, a Sub of the S 35 acres, of the E $\frac{1}{2}$ N E $\frac{1}{4}$ Sec 32, 39, 14 | | 37 to 43 | 2 |
| +Monticello Ave Lot | In H C Van Schaack's re-Sub of Blk 16 of Beebe's Sub, E $\frac{1}{2}$ N W $\frac{1}{4}$, except 5 acres in N E cor thereof, Sec 2, 39, 13 | | 1 to 8 | |
| +Avenue "K" Lot | Taylor's 2d Add to S Chicago in Sec 5, 37, 15 | | 17 to 24 | 12 |
| +Brookline Lot | Brookline Add to Cornell | Sub Blk 2 | 19 | |
| +Jeffrey Ave and 71st St Lot | Stave & Klemm's Add in Sec 25, 38, 14 | | 10 | 2 |
| +Loomis St Lot | F T Murphy's Sub, E $\frac{1}{2}$ E $\frac{1}{2}$ S W $\frac{1}{4}$ S W $\frac{1}{4}$ Sec 8, 38, 14 | | 1 to 10 | 1 |
| +Park Ave Lot | C J Hull's Sub of W $\frac{1}{2}$ S E $\frac{1}{4}$ Sec 9, 39, 13 | | 32 | |
| +Ninety-fifth St Lot | S 13 rods of E 13 rods of W $\frac{1}{2}$ S W $\frac{1}{4}$ Sec 6, 37, 14 | | | |
| +St. Lawrence Ave Lot | Washington Park Sub in Sec 10, 38, 14 | | 1 to 4 | 1 |
| +West 19th St Lot | Levi P Morton's Sub of S E $\frac{1}{4}$ S W $\frac{1}{4}$ Sec 24, 39, 13 | | W 115.5 ft of 1 | 1 |
| +Philip Ave Lot | South Chicago Heights, a Sub of W $\frac{1}{2}$ S W $\frac{1}{4}$ Sec 6, 37, 15 | | 39 to 46 | 6 |

Continued.

| Size of Lot. | Value of Lot. | Class of Buildings. | Value of Building. | Value of Heating Apparatus. | Value of Furniture, Libraries, etc. | Total Estimated Value of School Prop. |
|--------------|---------------|---------------------|--------------------|-----------------------------|-------------------------------------|---------------------------------------|
| 204x125½ | \$ 12,100 | 3 s brick | \$ 30,500 | \$ 2,000 | \$ 1,800 | \$ 46,400 |
| 200x173 | 25,000 | 3 s brick | 69,650 | 19,540 | 4,300 | 118,490 |
| 217x116 | 27,125 | 4 s brick | 41,555 | 6,000 | 3,000 | 77,680 |
| 200x148.5 | 15,000 | 3 s brick | 39,500 | 9,000 | 1,200 | 62,700 |
| 177x147 | 5,300 | 2 s wood | 5,500 | 500 | 600 | 11,900 |
| 200x125 | 15,000 | 3 s brick | 40,500 | 2,000 | 2,500 | 60,000 |
| 306.5x130 | 30,650 | 4 s brick | 47,300 | 7,200 | 2,500 | 153,150 |
| | | 3 s brick | 55,000 | 8,000 | 2,500 | |
| 250x123.5 | 7,500 | 3 s brick | 25,000 | 7,500 | 1,200 | 41,200 |
| 222x124 | 12,040 | 3 s brick | 63,000 | 13,300 | 3,000 | 91,340 |
| 209.25x167.4 | 20,925 | 3 s brick | 42,640 | 9,700 | 1,500 | 124,265 |
| 240x125.5 | 4,800 | 3 s brick | 40,000 | 7,000 | 2,500 | |
| 212x150 | 19,080 | 3 s brick | 36,240 | 5,600 | 1,200 | 47,840 |
| | | 2 s brick | 41,000 | 11,000 | 1,500 | 107,480 |
| | | 3 s brick | 33,300 | | 1,600 | |
| | | 2 s brick | 62,610 | 8,680 | 300 | 71,590 |
| 264x150 | 17,160 | 2 s brick | 77,000 | 15,600 | 3,000 | 112,760 |
| | | 3 s brick | 12,000 | 500 | 2,700 | 15,200 |
| 236.49x127 | 4,500 | | | | | 4,500 |
| 100x125 | 1,500 | | | | | 1,500 |
| 225x125 | 5,400 | | | | | 5,400 |
| 250x150 | 15,000 | | | | | 15,000 |
| 44x123 | 400 | | | | | 400 |
| 25x125 | 250 | | | | | 250 |
| 95x126 | 9,500 | | | | | 9,500 |
| 176x145.8 | 5,000 | | | | | 5,000 |
| 200x125 | 3,200 | | | | | 3,200 |
| 194.7x124 | 8,500 | | | | | 8,500 |
| 295.7x136.3 | 11,800 | | | | | 11,800 |
| 297x115.5 | 20,000 | | | | | 20,000 |
| 250x124.9 | 8,000 | | | | | 8,000 |
| 180x190 | 5,500 | | | | | 5,500 |
| 175x175 | 3,000 | | | | | 3,000 |
| 200x127.96 | 22,000 | | | | | 22,000 |
| 115.5x166 | 6,000 | | | | | 6,000 |
| 201.1x125.59 | 5,800 | | | | | 5,800 |

SCHEDULE F—

| SCHOOL. | Description of Lot. | Sub-Lot. | Lot. | Block. |
|-----------------------------------|--|--------------|--------------------------------|--------|
| † Orchard St Lot | Julia Foster Porter's Sub Blk 27, Canal Trustees' Sub in Sec 33, 40, 14 | | 18 | 2 |
| † Harvard Ave Lot ... | Stewart's Sub N $\frac{1}{2}$ S E $\frac{1}{4}$ Sec 28, 38, 14 | | 10 | 5 |
| † Butler St Lot | Schaare's Re-Sub of Schaare's Add to Auburn Park in N W $\frac{1}{4}$ Sec 33, 38, 14 | | 1 | |
| † Ninety-first St Lot .. | S E Gross' Fourth Add to Dauphin Park in S E $\frac{1}{4}$ Sec 3, 37, 14 | | 24 to 32 | 45 |
| § Ingleside Ave Lot ... | Egandale, a Sub of the E 118 acres, S W $\frac{1}{4}$ Sec 11, 38, 14 | | 11, 14, 15 & 18 | 12 |
| † Rebecca St Lot | Cook & Anderson's Sub of W $\frac{1}{2}$ N E $\frac{1}{4}$ Sec 24, 39, 13 | 4, 5 and 6 } | 6, 8, 9 and 17 S 124 ft 7 } | 8 |
| § West Thirteenth St Lot | Henry Waller's Sub N W $\frac{1}{4}$ N E $\frac{1}{4}$ Sec 20, 39, 14 | | 11 to 18 | 3 |
| † Morgan St Lot | Stanley Matthews' Sub in S E $\frac{1}{4}$ Sec 20, 37, 14 | | 25 to 34 | |
| † Sawyer Ave Lot | Waterman's Add to Morrell Park and Elsdon, a Sub in S E $\frac{1}{4}$ Sec 11, 38, 13 | | 25 to 34 | 11 |
| † Edgewood Ave Lot ... | Fricke & Dose's Sub in N W $\frac{1}{4}$ Sec 36, 40, 13 | | 19 to 26 | |
| Schools in Rented Buildings | | | | |
| Manual Training in | Grammar Schools, Machinery, Tools, | etc | | |
| Total | | | | |

* Lot belonging to School Fund.

† No school building on these lots.

§ Buildings

Continued.

| Size of Lot. | Value of Lot. | Class of Buildings. | Value of Building. | Value of Heating Apparatus. | Value of Furniture, Libraries, etc. | Total Estimated Value of School Prop. |
|---------------|---------------|---------------------|--------------------|-----------------------------|-------------------------------------|---------------------------------------|
| 297.57x125 | \$50,000 | | | | | \$ 50,000 |
| 100x160.6 | 6,000 | | | | | 6,000 |
| 297x200 | 18,000 | | | | | 18,000 |
| 235x125.25 | 5,500 | | | | | 5,500 |
| 213x158.5 | 20,000 | | | | | 20,000 |
| 199.53x124 | 13,900 | | | | | 13,900 |
| 192x107 | 27,200 | | | | | 27,200 |
| 248.31x125.27 | 3,000 | | | | | 3,000 |
| 249.65x126.1 | 4,000 | | | | | 4,000 |
| 204x140.5 | 15,000 | | | | | 15,000 |
| | | | | \$7,500 | \$35,000 | 42,500 |
| | | | | | 11,060 | 11,060 |
| | \$4,976,760 | | \$12,055,515 | \$2,005,465 | \$707,795 | \$19,745,535 |

on these lots in process of erection.

SCHEDULE G.**PUBLIC LIBRARY—MISCELLANEOUS.**

| | |
|--|---------------------|
| Books, 219,457 volumes (estimated value)..... | \$304,794 88 |
| Book Cases..... | 10,000 00 |
| Office and Miscellaneous Furniture and Fixtures, including | |
| List Plates..... | 14,000 00 |
| Total..... | <u>\$328,794 88</u> |

SCHEDULE H.
Wharfing Privileges and Mortgages.

| No. Letter. | Names of Mortgagors. | Location. | Lot. | Block. | Interest Payable By. | Am. Mtg. |
|-------------|------------------------|--|------|--------|------------------------|-------------|
| 1 | Geo. W. Dole | ..... | 9 | ..... | Mrs. C. Hyman..... | \$4,006 04 |
| 8 | Orrington Lunt. | East $\frac{1}{2}$ of West $\frac{1}{2}$ | 24 | ..... | { Augusta L. and.... } | 1,000 00 |
| 8 | Orrington Lunt. | West $\frac{1}{2}$ | 24 | ..... | " | 1,000 00 |
| 8 | Orrington Lunt. | East $\frac{1}{2}$ | 25 | ..... | " | 1,000 00 |
| 8 | Orrington Lunt. | West $\frac{1}{2}$ of East $\frac{1}{2}$ | 25 | ..... | " | 1,000 00 |
| 8 | Orrington Lunt. | East $\frac{1}{2}$ of West $\frac{1}{2}$ | 25 | ..... | " | 1,000 00 |
| 29 | E. S. Wadsworth | East $\frac{1}{2}$ | 18 | ..... | J. T. Ryerson..... | 1,000 00 |
| 29 | E. S. Wadsworth | West $\frac{1}{2}$ of East $\frac{1}{2}$ | 18 | ..... | J. T. Ryerson..... | 1,000 00 |
| 29 | E. S. Wadsworth | East $\frac{1}{2}$ of West $\frac{1}{2}$ | 18 | ..... | J. T. Ryerson..... | 1,000 00 |
| 29 | E. S. Wadsworth | West $\frac{1}{2}$ | 18 | ..... | A. N. Fullerton..... | 900 00 |
| 36 | A. N. Fullerton. | East $\frac{1}{2}$ | 5 | ..... | A. N. Fullerton..... | 900 00 |
| 43 | A. N. Fullerton. | 18 ft. West and adjacent E. 44 ft. | 5 | ..... | ..... | 165 00 |
| 49 | J. Y. Scammon | West 18 feet..... | 5 | ..... | ..... | 600 00 |
| 49† | T. Wadsworth. | Original Town, N. 40 ft. (Canal st) | 6 | ..... | ..... | 10,516 00 |
| 55 | J. Rogers and I. Cook. | Original Town..... | 9 | 5 | C. & N. W. Ry. Co..... | |
| | | { Original Town lot West of | 5 | 7 | ..... |  |
| | | { Sub lots 5, 6, 7 and 8 of.... } | 5 | 14 | ..... |  |
| | | { And lots West and adjoining } | 14 | 14 | ..... |  |
| | | { lots 10, 11 and 12 of..... } |  |  | ..... |  |
| 63 | James B. Murray | ..... |  |  | ..... | 4,160 00 |
| Total..... | | | | | | \$30,247 04 |

WHARFING PRIVILEGE.

| | LOT. | BLOCK. | AMOUNT. |
|------------------------------------|------------------------|--------|------------|
| James Leonard | 10 | 51 | \$ 150 00 |
| R. C. Bristol.....South ½ of | 4 | 44 | 600 00 |
| R. C. Bristol | 5 | 44 | 1,080 00 |
| Royal Houghton..... | 4, 5 & (ex. S. 30 ft.) | 51 | 1,620 00 |
| George Steel | 1 | 6 | 700 00 |
| S. Russell..... | 8 | 44 | 960 00 |
| Total | | | \$5,110 00 |

WHARFING PRIVILEGE LOTS.

| | LOT. | BLOCK. | AMOUNT. |
|--------------------|------|--------|------------|
| Original Town..... | 17 | 51 | \$ 275 00 |
| Original Town..... | 6 | 51 | 600 00 |
| Original Town..... | 5 | 51 | 525 00 |
| Original Town..... | 8 | 51 | 600 00 |
| Total | | | \$2,110 00 |

SCHEDULE I.**Street Lamps and Posts.****GAS AND BOULEVARD LAMPS.**

| | |
|----------------------|--|
| North Division | 7,180 |
| South Division..... | 11,081 |
| West Division..... | <u>17,825</u> |
| Total | 36,086 at \$25 00 each, <u><u>\$902,150 00</u></u> |

RECAPITULATION.

Buildings.

| | | |
|---------------------------|-----------------|-----------------|
| Miscellaneous..... | \$ 2,678,941 38 | |
| Fire | 689,900 00 | |
| Police..... | 614,576 93 | |
| School | 12,055,515 00 | |
| Public Library | 1,494,716 58 | |
| Electric Light Plant..... | 84,419 87 | |
| | <hr/> | \$17,618,069 76 |

Real Estate.

| | | |
|---------------------------|--------------|--------------|
| Miscellaneous..... | 1,864,500 00 | |
| Fire | 373,925 00 | |
| Police..... | 333,745 00 | |
| School | 4,976,760 00 | |
| Electric Light Plant..... | 45,557 24 | |
| | <hr/> | 7,594,487 24 |

Miscellaneous.

| | | |
|--|---------------|-------------------------------|
| Fire Alarm Telegraph | 643,392 47 | |
| Fire Apparatus..... | 855,247 00 | |
| Police Furniture and Equipments | 192,148 51 | |
| School Furniture and Heating Apparatus.. | 2,713,260 00 | |
| Electric Light Plant, Miscellaneous..... | 633,146 18 | |
| Street Lamps and Posts..... | 902,150 00 | |
| Public Library | 328,794 88 | |
| Waterworks | 25,336,659 58 | |
| Law Library | 1,809 75 | |
| Wharfing Privilege Mortgages | 30,247 04 | |
| | <hr/> | 31,636,855 41 |
| Total..... | | <u><u>\$56,849,412 41</u></u> |

SCHEDULE J.

Statement of Sale and Redemption of Bonds from January 1, 1896, to December 31, 1896.

Bonds Sold.

| DATE OF SALE. | KIND OF BONDS. | NUMBERS. | DENOMINATION. | RATE OF SALE. | INTEREST. | AMOUNT. | DATE OF ISSUE. | WHEN DUE. |
|------------------|----------------|----------|---------------|---------------|-----------|--------------|----------------|------------|
| July, 1896. | Municipal | 1 to 100 | \$1,000 | 1.03789 | 4% | \$100,000 00 | July, 1896 | July, 1916 |

SCHEDULE J—Continued.
Bonds Redeemed and Cancelled.

| KIND OF BONDS. | NUMBERS. | NO. | DENOMINATION. | TOTAL. | DATE OF ISSUE. | INT. | WHEN DUE. |
|-------------------|------------------------|-----|---------------|--------------|----------------|------|-------------|
| Municipal | 1 to 57 inclusive..... | 86 | \$1,000 00 | \$86,000 00 | July, 1876 | 6% | July, 1896 |
| | 62 to 66 " | | | | | | |
| | 69 to 73 " | | | | | | |
| | 77 to 95 " | | | | | | |
| Municipal | 1 to 100 " | 100 | 1,000 00 | 100,000 00 | July, 1866 | 7% | July, 1896 |
| | Hyde Park (Water)... | | | | | | |
| | 501 to 509 " | | | | | | |
| Town of Lake..... | 46 to 60 " | 15 | 1,000 00 | 15,000 00 | April, 1888 | 5% | April, 1896 |
| | Total..... | 210 | ..... | \$210,000 00 | | | |

Water Certificates, 5%.

| | |
|-----------------------------|---------------------------------------|
| Certificates issued | \$364,500 00 |
| Certificates redeemed | 363,000 00 |
| Outstanding..... | \$1,500 00 |
| | { No. 106, \$1,000 } Holders unknown. |
| | { No. 408, 500 } |

FLOATING DEBT.**December 31st, 1896.**

| | | |
|--|----------------|-----------------|
| Interest (outstanding)..... | \$ 514,937 95 | |
| Judgments (appropriated for)..... | 402,720 57 | |
| Judgments (not appropriated for)..... | 1,167,940 72 | |
| Pension Funds..... | 192,248 07 | |
| Sinking Funds..... | 1,205,952 65 | |
| Special Funds..... | 914,387 74 | |
| Taxes for Street Intersections..... | 999,000 00 | |
| Accounts Payable (Miscellaneous)..... | 802,755 41 | |
| Time or Revenue Warrants..... | 2,470,287 85 | |
| Total Debt, January 1, 1896 | \$8,670,230 96 | |
| Less Cash in Treasury, Bank, etc | 4,146,163 70 | |
| Net Debt December 31, 1896 | | \$ 4,524,067 26 |
| To this add Water Certificates outstanding.. | | 1,500 00 |
| Floating Debt, December 31, 1896 | | \$ 4,525,567 26 |

FUNDED DEBT.

Chicago City Bonds Outstanding.

| | | |
|--|--------------|----------------|
| (E.) 4 per cent. Bonds, due Jan. 1, 1914. . . | \$ 60,000 00 | |
| (K.) 4 per cent. Bonds, due April 1, 1901. . . | 843,450 00 | |
| | <hr/> | \$ 903,450 00 |
| World's Fair Bonds, 4 per cent. Bonds, due January 1, 1921. | | 4,517,000 00 |
| City Bridewell or House of Correction (O.) 7 per cent. Bonds, due July 1, 1899. . . . | \$150,000 00 | |
| | <hr/> | 150,000 00 |
| Tunnel (P): | | |
| 4 per cent. Bonds, due July 1, 1916. . . . | \$100,000 00 | |
| 7 per cent. Bonds, due January 1, 1898. . | 100,000 00 | |
| 7 per cent. Bonds, due July 1, 1898. . . . | 98,000 00 | |
| 7 per cent. Bonds, due January 1, 1899. . | 98,000 00 | |
| 7 per cent. Bonds, due July 1, 1899. . . . | 70,000 00 | |
| 7 per cent. Bonds, due September 1, 1899. . | 228,000 00 | |
| | <hr/> | 694,000 00 |
| 7 per cent. Bonds, due October 1, 1898. . | \$100 000 00 | |
| 7 per cent Bonds, due July 1, 1899. . . . | 198,000 00 | |
| | <hr/> | 298,000 00 |
| School (R.): | | |
| 4 per cent. Bonds, due April 1, 1907. . . . | \$65,000 00 | |
| 4 per cent. Bonds, due January 1, 1908. . | 81,000 00 | |
| 4 per cent. Bonds, due July 1, 1908. . . . | 145,000 00 | |
| 4 per cent. Bonds, due January 1, 1911. . | 476,000 00 | |
| 3½ per cent. Bonds, due July 1, 1910. . . | 135,000 00 | |
| 7 per cent. Bonds, due July 1, 1899. . . . | 200,000 00 | |
| | <hr/> | 1,102,000 00 |
| | <hr/> | \$7,750,450 00 |
| Sewerage Bonds— | | |
| 4 per cent. Bonds, due July 1, 1912. . . . | \$490,000 00 | |
| 4 per cent. Bonds, due July 1, 1914. . . . | 782,500 00 | |
| 4½ per cent. Bonds, due July 1, 1900. . . . | 489,500 00 | |
| 4 per cent. Bonds, due July 1, 1908. . . . | 387,000 00 | |
| 4 per cent. Bonds, due July 1, 1904. . . . | 458,000 00 | |
| | <hr/> | \$2,607,000 00 |

River Improvement Bonds—

| | | |
|---|---------------|----------------|
| 4 per cent. Bonds, due January 1, 1911. | \$ 250,000 00 | |
| 4 per cent. Bonds, due July 1, 1912. | 249,000 00 | |
| 4 per cent. Bonds, due July 1, 1913 | 500,000 00 | |
| 4 per cent. Bonds, due July 1, 1914. | 343,500 00 | |
| 4 per cent. Bonds, due July 1, 1915. | 1,243,000 00 | |
| | <hr/> | \$2,605,500 00 |

Water Bonds—

| | | |
|---|--------------|----------------------|
| 6 per cent. Bonds, due July 1, 1897. | \$ 50,000 00 | |
| 6 per cent. Bonds, due January 1, 1898. | 82,000 00 | |
| 3½ per cent. Bonds, due July 1, 1910 | 108,500 00 | |
| 4 per cent. Bonds, due July 1, 1912. | 821,000 00 | |
| 4 per cent. Bonds, due July 1, 1914. | 446,000 00 | |
| 4 per cent. Bonds, due July 1, 1915. | 1,485,000 00 | |
| 3.65 per cent. Bonds, due July 1, 1902 | 332,000 00 | |
| 4 per cent. Bonds, due July 1, 1908 | 150,000 00 | |
| 4 per cent. Bonds, due July 1, 1910. | 159,500 00 | |
| 3½ per cent. Bonds, due July 1, 1909. | 225,000 00 | |
| 4 per cent. Bonds, due January 1, 1914. | 130,000 00 | |
| | <hr/> | 3,989,000 00 |
| | | <hr/> \$9,201,500 00 |

Annexed Districts.

Town of Lake "Water Bonds"—

| | | |
|---------------------------------------|--------------|-----------|
| 5 per cent. Bonds, due April 1, 1897. | \$ 15,000 00 | |
| 5 per cent. Bonds, due April 1, 1898. | 15,000 00 | |
| 5 per cent. Bonds, due April 1, 1899. | 15,000 00 | |
| 5 per cent. Bonds, due April 1, 1900. | 15,000 00 | |
| 5 per cent. Bonds, due April 1, 1901. | 15,000 00 | |
| 5 per cent. Bonds, due April 1, 1902. | 15,000 00 | |
| | <hr/> | 90,000 00 |

Hyde Park "Water Bonds"—

| | | |
|---|--------------|-----------|
| 5 per cent. Bonds, due January 1, 1904. | \$ 50,000 00 | |
| | <hr/> | 50,000 00 |

Lake View "Water Bonds"—

| | | |
|--------------------------------------|--------------|-----------|
| 5 per cent. Bonds, due July 1, 1904. | \$ 23,000 00 | |
| 4 per cent. Bonds, due July 1, 1907. | 50,000 00 | |
| | <hr/> | 73,000 00 |

| | | |
|------------------------|-------|-----------------|
| Total Bonded Debt..... | <hr/> | \$17,078,950 00 |
|------------------------|-------|-----------------|

RECAPITULATION.

| | | |
|---|------------------|-------------------------|
| City of Chicago 3½ per cent. Bonds..... | \$ 135,000 00 | |
| City of Chicago 4 per cent. Bonds (World's Fair included)..... | 11,010,450 00 | |
| City of Chicago 4½ per cent. Bonds..... | 489,500 00 | |
| City of Chicago 7 per cent. Bonds..... | 1,242,000 00 | |
| | | \$ 12,876,950 00 |
| Water Loan 3½ per cent..... | \$ 333,500 00 | |
| Water Loan 3.65 per cent..... | 332,000 00 | |
| Water Loan 4 per cent..... | 3,191,500 00 | |
| Water Loan 6 per cent..... | 132,000 00 | |
| Town of Lake Water Bonds..... | 90,000 00 | |
| Hyde Park Water Bonds..... | 50,000 00 | |
| Lake View Water Bonds..... | 73,000 00 | |
| | | \$ 4,202,000 00 |
| Total Bonded Debt | | \$ 17,078,950 00 |
| General Sinking Fund | \$ 617,886 94 | |
| River Improvement Sinking Fund..... | 235,601 45 | |
| School Sinking Fund..... | 153,672 25 | |
| Sewerage Sinking Fund..... | 198,792 01 | |
| Bonds Payable from Revenue of Water Department | 4,202,000 00 | |
| | | \$ 5,407,952 65 |
| Net Funded Debt. | | <u>\$ 11,670,997 35</u> |
| Total Indebtedness of City of Chicago, December, 31, 1896. | | |
| Bonded Debt..... | \$ 17,078,950 00 | |
| Floating Debt..... | 4,525,567 26 | |
| | | <u>\$ 21,604,517 26</u> |

TAX COLLECTIONS.

Taxes of 1895 Collected During 1896.

| | |
|----------------------------------|-------------------------|
| South Town Collector..... | \$ 1,915,321 45 |
| West Town Collector..... | 601,592 44 |
| North Town Collector..... | 344,924 65 |
| Hyde Park Collector..... | 453,493 70 |
| Town of Lake Collector..... | 265,264 80 |
| Lake View Collector..... | 110,939 49 |
| Town of Jefferson Collector..... | 29,370 12 |
| Calumet Collector..... | 8,102 85 |
| Norwood Park Collector..... | 1,904 51 |
| Maine Collector..... | 17 61 |
| Evanston Collector..... | 11,217 53 |
| Niles Collector..... | 27 70 |
| County Collector..... | 10,091,848 48 |
| • Total | <u>\$ 13,834,026 73</u> |

STATE OF ILLINOIS, }
COUNTY OF COOK, } ss.
CITY OF CHICAGO. }

O. D. Wetherell, Comptroller of said city, being duly sworn, says that the foregoing annual statement, so far as he knows, or has reason to believe, is a fair, accurate and full statement of all moneys in his hands, or which he, or anyone for him, has received during the twelve months ending December 31, 1896, and that he has not, directly or indirectly, unlawfully used, loaned, invested or converted to his own use, or suffered anyone to unlawfully use, loan or invest, or convert to his or their use, any of the moneys receivable or received by him, or any of the securities under his control, but that he has acted without any collusion or fraud in the collection or disbursement of public moneys of said city, and that he has rendered a true and full account thereof in his statement, so far as he knows or has reason to believe.

O. D. WETHERELL,
Comptroller.

Subscribed and sworn to before me this 24th day of March, 1897.

[SEAL.]

NATHAN HEFTER,
Notary Public.

The Finance Committee have examined and approved the foregoing annual statement of the financial condition of the city by the Comptroller, and direct that the same be printed in pamphlet form.

M. B. MADDEN,
JOHN O'NEILL,
JOS. E. BIDWILL,
JAMES L. CAMPBELL,
GEORGE A. MUGLER,
CYRUS H. HOWELL,
GEORGE B. MILNE,
JOSEPH F. HAAS,
CLARK T. NORTHROP,
AUGUST W. MILLER,
WM. FINKLER,
JOHN POWERS,
HENRY STUCKART,

Finance Committee.

CITY ENGINEER'S OFFICE.

**Uncompleted Contracts—Approximate Amount Required to Complete
December 31, 1896**

| | |
|---|-------------|
| Fitzsimons & Connell Co., New Land Tunnel, section 1. | \$35,000 00 |
| Joseph J. Duffy, New Land Tunnel, section 2. | 275,000 00 |
| Weir, McKechney & Co., New Land Tunnel, section 3. | 425,000 00 |
| Fitzsimons & Connell Co., New Lake Tunnel and Crib. | 859,000 00 |
| Ross & Ross, 68th Street Tunnel Extension. | 70,000 00 |
| Lydon & Drews, Two Mile Crib off 68th street | 9,380 00 |
| Crane Company, brass castings. | 2,100 00 |
| L. Craney, teaming. | 14,270 00 |
| J. J. Gallery | 1,700 00 |
| Oberndorf Brothers, teaming | 60 00 |
| Russel Bros. & Young, hydrant rings and covers | 1,860 00 |
| J. H. Bass, hydrant and stop valve castings. | 7,490 00 |
| J. H. Bass, special castings, W. P. E. | 4,145 00 |
| Superior Lumber Company, pine lumber, pipe yards. | 3,690 00 |
| John Spry Lumber Company, pine lumber, bridges and via- ducts | 5,400 00 |
| John Spry Lumber Company, white oak lumber, pipe yards | 520 00 |
| Weaver Coal Company, soft coal at Harrison street. | 13,700 00 |
| Weaver Coal Company, soft coal at Chicago avenue. | 16,500 00 |
| Weaver Coal Company, soft coal at 14th street. | 14,150 00 |
| Baker Brothers, hard coal, Chicago avenue | 47,000 00 |
| Baker Brothers, hard coal, steam bridges. | 2,900 00 |
| Baker Brothers, soft coal, Washington Heights. | 1,000 00 |
| Baker Brothers, soft coal, Norwood Park | 200 00 |
| Baker Brothers, soft coal, Canal Pumping Works | 24,400 00 |
| J. T. Connery, soft coal, Lake View | 15,000 00 |
| Philadelphia & Reading Coal Company, soft coal, West Pumping Works | 28,500 00 |
| Philadelphia & Reading Coal Company, soft coal, Fullerton avenue. | 2,000 00 |
| L. Hohman, tug service. | 6,996 00 |
| William H. Gray & Bro., cleaning and piping well at Nor- wood Park. | 2,046 00 |
| E. Earnshaw & Son, building repair shops. | 7,000 00 |

| | |
|---|------------|
| Knisley Brothers, sheet metal work, repair shops | \$2,150 00 |
| Vierling, McDowell, structural iron work, repair shops | 725 00 |
| W. J. Ryan, engine house, 95th street | 2,361 00 |
| C. W. Gindele, building Wentworth Avenue Bath | 4,301 00 |
| Dearborn Foundry Company, iron work, Wentworth Avenue Bath | 582 00 |
| J. G. McCarthy, painting and glazing, Wentworth Avenue Bath | 429 00 |
| P. Nacey & Co., plumbing and sewerage, Wentworth Avenue Bath | 874 00 |
| M. J. Cragin, steam heating, Wentworth Avenue Bath | 137 00 |
| Siemens-Halske Company, dynamos and engines, Isolation Hospital | 2,120 00 |
| American Laundry Machine Company, laundry machinery, Isolation Hospital | 735 00 |

REPORT OF CITY TREASURER.

To the Mayor and Aldermen of the City of Chicago in the City Council assembled:

The undersigned, in compliance with Section 108, of Article VII, of the City Charter, respectfully submits herewith his annual report of all receipts and expenditures during the fiscal year ending December 31, 1896, and the amount in the Treasury at that date:

| | |
|---|----------------|
| Balance in Treasury January 1, 1896 | \$1,891,301 92 |
|---|----------------|

Receipts.

| | |
|---|---------------|
| City Markets..... | \$ 5,507 80 |
| Department Public Works Fund, 1896 | 161,196 77 |
| Fees..... | 7,323 80 |
| Fire Department Fund, 1896..... | 13,364 10 |
| General Taxes, 1895..... | 10,282,301 37 |
| General Fund, 1896 | 174,225 19 |
| Harrison and Tree Income Fund..... | 123 80 |
| Health Department Fund, 1896..... | 3,038 78 |
| House of Correction Fund, 1896... .. | 57,719 93 |
| Insurance Tax..... | 23,117 18 |
| Interest Account, 1896..... | 22 74 |
| Jonathan Burr Fund..... | 1,979 36 |
| Licenses | 3,572,819 75 |
| Pounds | 5,048 33 |
| Police Fund, 1896..... | 22,929 94 |
| Police Courts, First District | 23,921 80 |
| Police Courts, Second District | 7,021 90 |
| Police Courts, Third District..... | 7,717 50 |
| Police Courts, Fourth District... .. | 8,826 31 |
| Police Courts, Fifth District | 3,280 40 |
| Police Courts, Sixth District | 3,158 10 |
| Police Courts, Seventh District..... | 9,405 48 |
| Police Courts, Eighth District..... | 2,786 70 |
| Police Courts, Ninth District..... | 1,546 00 |
| Police Courts, Tenth District..... | 1,929 35 |
| Police Courts, Eleventh District..... | 198 00 |
| Rogers Park..... | 157 00 |
| Police Life and Health Insurance Fund.... | 1,520 00 |
| Public Library Taxes, 1895..... | 197,943 67 |

| | | |
|--|--------------|-----------------|
| Public Library Fund, 1896..... | \$ 6,480 60 | |
| Rents | 40,437 43 | |
| School Fund..... | 4,199,627 30 | |
| School Taxes, 1895..... | 3,453,780 69 | |
| School Tax Fund, 1896..... | 13,681 94 | |
| Sewerage Fund, 1896 | 152,984 99 | |
| Special Assessment and Dept. Fund..... | 3,976,875 75 | |
| Special Deposit, D. P. W..... | 196,739 24 | |
| Special Deposit Fund..... | 25,566 75 | |
| Special Fund "W"..... | 244,932 28 | |
| Special Tax Purchase, 1886 | 3 00 | |
| Special Tax Purchase, 1890 | 1,102 82 | |
| Special Tax Purchase, 1891 | 11 30 | |
| Special Tax Purchase, 1892 | 642 00 | |
| Special Tax Purchase, 1893 | 5,870 87 | |
| Special Tax Purchase, 1894 | 5,062 49 | |
| Special Tax Purchase, 1895 | 4,135 52 | |
| Street Lamp Fund, 1896 | 480,355 05 | |
| Tax Deeds, 1878..... | 165 23 | |
| Temporary Loans Levy of 1896 ... | 1,028,987 73 | |
| Water Fund | 3,531,793 79 | |
| Wharfing Interest | 1,377 06 | |
| | | \$31,968,744 88 |
| Total Receipts..... | | \$33,860,046 80 |

Disbursements.

| | |
|--|--------------|
| Contingent Fund, 1895..... | \$ 884 25 |
| Contingent Fund, 1896..... | 4,058 76 |
| Department Public Works Fund, 1894 | 278 00 |
| Department Public Works Fund, 1895..... | 159,805 04 |
| Department Public Works Fund, 1896 | 231,611 65 |
| Fire Department Fund, 1894 | 605 00 |
| Fire Department Fund, 1895..... | 20,612 90 |
| Fire Department Fund, 1896. | 1,366,979 64 |
| General Fund, 1895 | 146,441 27 |
| General Fund, 1896 | 1,368,563 84 |
| General Sinking Fund..... | 86,000 00 |
| Health Department Fund, 1895 | 5,085 51 |
| Health Department Fund, 1896 | 159,623 47 |
| House of Correction Fund, 1895..... | 19,987 09 |
| House of Correction Fund, 1896..... | 82,685 64 |
| Interest Account, 1896..... | 668,686 76 |
| Jonathan Burr Fund | 2,183 68 |

STATEMENT OF FINANCES

| | | |
|---|--------------|----------------------------|
| Police Fund, 1895..... | \$ 7,183 06 | |
| Police Fund, 1896..... | 3,223,409 19 | |
| Police Life and Health Insurance Fund.... | 100 00 | |
| Public Library Fund, 1895 | 4,863 91 | |
| Public Library Fund, 1896 | 561,384 88 | |
| School Fund | 3,934,407 91 | |
| School Tax Fund, 1895..... | 241,523 03 | |
| School Tax Fund, 1896..... | 6,280,654 82 | |
| Sewerage Fund, 1895..... | 40,582 49 | |
| Sewerage Fund, 1896..... | 298,680 71 | |
| Special Assessment and Dept. Fund..... | 4,213,722 77 | |
| Special Deposit, D. P. W..... | 217,722 68 | |
| Special Deposit Fund..... | 36,321 10 | |
| Special Fund "W" | 203,074 52 | |
| Street Lamp Fund, 1894..... | 1,350 00 | |
| Street Lamp Fund, 1895 | 315,239 15 | |
| Street Lamp Fund, 1896 | 739,399 60 | |
| Temporary Loans Levy of 1895 | 1,186,404 37 | |
| Water Fund | 3,400,827 98 | |
| | <hr/> | \$30,240,944 67 |
| Balance in Treasury at close of business | | |
| December 31, 1896..... | | <hr/> <hr/> \$3,619,102 13 |

Respectfully submitted,
 ADAM WOLF,
City Treasurer

REPORT OF SCHOOL AGENT.

Statement of Receipts and Expenditures and the Condition of the School and Special Funds for the Year Ending December 31, 1897.

| | |
|---|-------------|
| Cash on hand January 1, 1896..... | \$ 1,025 65 |
| Cash in Royal Trust Company Bank to meet outstanding checks to teachers | 43,282 65 |

RECEIPTS.

| | |
|--|--------------|
| Bills Receivable : | |
| From notes paid..... | \$ 7,600 00 |
| City of Chicago Bonds : | |
| From redemption of water certifi- cates | 5,500 00 |
| City Treasurer : | |
| From Comptroller's warrants.... | 3,931,485 50 |
| Calhoun Fund : | |
| From interest on bonds | 33 00 |
| Carpenter Fund : | |
| From interest on bonds..... | 60 00 |
| Expense : | |
| From court cost refunded..... | 24 30 |
| Foster Medal Fund : | |
| From interest on mortgage..... | \$ 60 00 |
| From transferred from income account | 59 88 |
| From donation..... | 4,100 00 |
| | 4,219 88 |

George Howland Fund :

| | |
|--------------------------------|----------|
| From interest on mortgage..... | \$ 70 00 |
|--------------------------------|----------|

Perkins Bass Fund :

| | |
|--|----------------|
| From Perkins Bass account..... | \$ 500 00 |
| From interest on mortgage..... | 55 50 |
| From Perkins Bass principal ac- count | 4,000 00 |
| | <hr/> 4,555 50 |

Holden Fund :

| | |
|------------------------------|------|
| From interest on bonds | 9 00 |
|------------------------------|------|

Interest :

| | |
|--------------------------------|----------------------|
| From bonds and mortgages | \$ 51,259 43 |
| From premiums | 75 00 |
| | <hr/> 51,334 43 |
| | <hr/> \$4,004,891 61 |

Jones Fund :

| | |
|--------------------------------|-------|
| From interest on mortgage..... | 60 00 |
|--------------------------------|-------|

Michael Reese Fund :

| | |
|-----------------------------|--------|
| From interest on bonds..... | 120 00 |
|-----------------------------|--------|

Moseley Public Book Fund :

| | |
|---------------------------------|--------------|
| From interest on bonds..... | \$547 50 |
| From interest on mortgage | 60 00 |
| | <hr/> 607 50 |

Newberry Fund :

| | |
|------------------------------|-------|
| From interest on bonds | 60 00 |
|------------------------------|-------|

Rents :

| | |
|--------------------------|------------|
| From lots and land | 532,223 43 |
|--------------------------|------------|

Sheldon Fund :

| | |
|-----------------------------|--------|
| From interest on bonds..... | 150 00 |
|-----------------------------|--------|

State Dividend :

| | |
|--|------------|
| From County Superintendent of Schools | 279,924 55 |
|--|------------|

Teachers' Fund :

| | |
|---|--------------------|
| From city school tax fund | \$3,331,700 00 |
| From tuition of non-residents .. | 3,973 65 |
| From errors in teachers' pay rolls | 342 21 |
| | <hr/> 3,336,015 86 |

W. K. Sullivan Fund :

| | |
|----------------------------|-------|
| From interest, bonds | 18 00 |
|----------------------------|-------|

Special Assessment :

| | | |
|--------------------|-----------|-----------------------|
| From rebate | \$ 124 73 | |
| | <hr/> | 4,149,304 07 |
| | | <hr/> |
| | | <u>\$8,198,503 98</u> |

EXPENDITURES.

Bills Receivable:

| | | |
|--|------------|--------------|
| For notes purchased secured by trust deeds on Chicago real estate..... | \$5,850 00 | |
| For City of Chicago water certifi- cates..... | 5,500 00 | |
| | <hr/> | \$ 11,350 00 |

City Treasurer:

| | |
|------------------------------|--------------|
| For deposited with him | 4,199,572 30 |
|------------------------------|--------------|

Carpenter Fund:

| | |
|------------------------------|-------|
| For books and magazines..... | 28 30 |
|------------------------------|-------|

Expense:

| | | |
|--|----------|----------|
| For M. M. O'Donohue (dower).... | 75 00 | |
| For abstract of title..... | 37 50 | |
| For printing | 126 38 | |
| For quit-claim deed E. $\frac{1}{2}$ S. E. $\frac{1}{4}$ Sec. 34, 18, 14..... | 50 00 | |
| For rent of box in National Safe Depository..... | 30 00 | |
| For court costs..... | 140 62 | |
| For stenographers' services..... | 175 50 | |
| For legal services (L. C. Collins). | 1,500 00 | |
| For special assessments..... | 504 28 | |
| For accrued interest..... | 54 39 | |
| For insurance on property secured by mortgage note of J. B. Foote. | 7 50 | |
| For redemption of property from tax sales held as security for payment of J. B. Foote mort- gage notes..... | 78 87 | |
| | <hr/> | 2,780 04 |

Foster Medal Fund:

| | | |
|--|--------|--------|
| For engrossing diplomas..... | 100 40 | |
| For transferred to investment ac- count | 59 88 | |
| | <hr/> | 160 28 |

Hesing German Fund :

| | | |
|----------------|----------|----------------------|
| For books..... | \$ 23 65 | |
| | | <hr/> \$4,213,914 57 |

Moseley Book Fund :

| | | |
|----------------|--------|--|
| For books..... | 726 70 | |
|----------------|--------|--|

Newberry Fund :

| | | |
|----------------|-------|--|
| For books..... | 58 83 | |
|----------------|-------|--|

Royal Trust Company :

| | | |
|--|-----------|--|
| For balance to meet outstanding checks to teachers..... | 40,502 21 | |
|--|-----------|--|

Sheldon Fund :

| | | |
|---------------------------------|-------|--------------|
| For books..... | 91 16 | |
| For engravings and frames | 55 55 | |
| For medals..... | 8 00 | |
| | | <hr/> 154 71 |

Teachers' Pay Rolls :

| | | |
|---|--------------|--|
| For paid Superintendent, Assist- ant Superintendent and teach- ers..... | 3,931,485 50 | |
|---|--------------|--|

Taylor Library Fund :

| | | |
|-----------------|------|--|
| For books | 1 01 | |
|-----------------|------|--|

Michael Reese Fund :

| | | |
|----------------|--------|--|
| For books..... | 176 76 | |
|----------------|--------|--|

Jones Fund :

| | | |
|----------------|-------|--|
| For books..... | 64 34 | |
|----------------|-------|--|

Calhoun Fund :

| | | |
|----------------|-------|--|
| For books..... | 15 49 | |
|----------------|-------|--|

Perkins Bass Fund :

| | | |
|-------------------|--------|--------------------|
| For statuary..... | 459 84 | |
| | | <hr/> 3,973,645 39 |

| | | |
|-----------------------------------|-----------|--|
| Cash on hand January 1, 1897..... | 10,944 02 | |
|-----------------------------------|-----------|--|

\$8,198,503 98

Condition of School and Special Funds, January 1, 1897.

| | |
|----------------------------|---------------|
| School fund principal..... | \$ 911,727 25 |
| Wharfing lot fund..... | 68,061 94 |
| State dividend..... | 6,800 00 |

| | | |
|--------------------------|---------------|----------------|
| Teachers' fund..... | \$ 315,080 40 | |
| Teachers' pay rolls..... | 40,502 21 | |
| | <hr/> | \$1,342,171 80 |
| Carpenter Fund: | | |
| Principal invested..... | \$ 1,000 00 | |
| Interest..... | 102 32 | |
| | <hr/> | 1,102 32 |
| Calhoun Fund: | | |
| Principal invested | 500 00 | |
| Interest | 52 48 | |
| | <hr/> | 552 48 |
| Foster Medal Fund: | | |
| Principal invested..... | | 5,000 00 |
| George Howland Fund: | | |
| Principal invested..... | 1,000 00 | |
| Interest..... | 202 61 | |
| | <hr/> | 1,202 61 |
| Perkins Bass Fund: | | |
| Principal invested..... | 1,850 00 | |
| Interest..... | 95 66 | |
| | <hr/> | 1,945 66 |
| Goodrich Fund | | 18 44 |
| Hesing German Fund..... | | 26 71 |
| Holden Fund: | | |
| Principal invested..... | 150 00 | |
| Interest | 60 62 | |
| | <hr/> | 179 61 |
| Jones Fund: | | |
| Principal invested..... | 1,000 00 | |
| Interest. | 60 62 | |
| | <hr/> | 1,060 62 |
| Moseley Book Fund: | | |
| Principal invested..... | 11,000 00 | |
| Interest | 212 58 | |
| | <hr/> | 11,212 58 |
| Michael Reese Fund: | | <hr/> |
| Principal invested..... | 2,000 00 | \$1,364,472 83 |
| Interest..... | 40 70 | |
| | <hr/> | 2,040 70 |
| Newberry Fund: | | |
| Principal invested..... | 1,000 00 | |
| Interest..... | 28 38 | |
| | <hr/> | 1,028 38 |

Sheldon Fund:

| | | |
|---------------------------|----------|-------------|
| Principal invested.....\$ | 2,500 00 | |
| Interest | 115 75 | |
| | <hr/> | \$ 2,615 75 |

| | |
|---------------------------|------|
| Taylor Library Fund | 1 16 |
|---------------------------|------|

W. K. Sullivan Fund:

| | | |
|-------------------------|--------|--------|
| Principal invested..... | 300 00 | |
| Interest..... | 18 00 | |
| | <hr/> | 318 00 |

6,003 99

1,370,476 82

Invested as follows:

| | | |
|---|------------|----------------|
| Bills receivable, mortgages | 728,500 00 | |
| Bills receivable, personal security.. | 250 00 | |
| City Chicago Bonds..... | 251,000 00 | |
| City Railway Bonds..... | 400 00 | |
| Joseph N. Barker lot..... | 3,000 00 | |
| N. ½ lot 14 in blk. 60 in Russell, Mather & Roberts, addn..... | 850 00 | |
| Hegewisch property..... | 1,500 00 | |
| Bartlett property..... | 400 00 | |
| Foot property..... | 2,000 00 | |
| Premium on bonds..... | 11,505 84 | |
| Real estate..... | 8,350 00 | |
| Special assessment on school fund property..... | 16,596 70 | |
| Cash in Royal Trust Co. Bank, January 1, 1897..... | 40,502 21 | |
| Cash in City Treasury, Jan. 1, 1897. | 294,678 05 | |
| | <hr/> | 1,359,532 80 |
| Cash on hand, January 1, 1897..... | | 10,944 02 |
| | | <hr/> |
| | | \$1,370,476 82 |
| | | <hr/> |

W. A. S. GRAHAM,
School Agent.

REAL ESTATE BELONGING TO SCHOOL FUND.

| LESSEE. | Description. | Sub-Lot. | Lot. | Blk. | Size of Lot. | Date of Lease. | Expiration of Lease. | Appraised Valuation of 1885. | Annual Rental to May 8, 1885. |
|---------------------------------|--------------------------------------|----------|--------------------------------|------|---|----------------|----------------------|------------------------------|-------------------------------|
| Board of Education | <i>Bronson's Add.</i> | | 207 | | 264x181.05 | No Lease | | \$82,000 00 | \$4,920 00 |
| | South 284 feet of | | | | | | | | |
| | <i>Fractional Section 15 Add.</i> | | | | | | | | |
| Eugene S. Pike..... | { South 10 feet of | 3 | { | | | | | | |
| | { North 10 feet of | 4 | { | | | | | | |
| | <i>Original Town.</i> | | | | | | | | |
| Harry Brown | East 66 feet of | | 9 | 50 | 66x56 | July 1, 1881 | May 8, 1885 | 40,000 00 | 2,400 00 |
| | Lucius B. Otis..... | | 9 | 50 | 84x56 | May 6, 1882 | May 8, 1885 | 44,000 00 | 2,640 00 |
| | The Chicago Daily News Company | | 6 | 55 | 80x179.9 | Jan. 24, 1881 | May 8, 1885 | **220,000 00 | 13,200 00 |
| | Charles Netcher | | 6 | 58 | 80x160.28 | Jan. 10, 1881 | May 8, 1885 | **400,000 00 | 24,000 00 |
| <i>School Section Addition.</i> | | | | | | | | | |
| John M. Smyth..... | | | 1 | 1 | 204.65x180 | May 31, 1881 | May 8, 1885 | **183,333.33 | 11,000 00 |
| | Charles H. Blair..... | | 2 to 9 inc. | 1 | 200x100 | June 1, 1881 | May 8, 1885 | 180,000 00 | 10,800 00 |
| | John and Thomas Coughlan..... | | 10 | 1 | 20x150 | May 8, 1880 | May 8, 1885 | 13,000 00 | 780 00 |
| | Charles H. Blair..... | | 11 to 15 inc. 16 to 20 inc. | 1 | 125x150 136.65x100 204.92x189 50x118.325 34x100 | June 1, 1881 | May 8, 1885 | 145,000 00 | 8,700 00 |
| Board of Education | | | 21 | 1 | 50x80.025 50x80.025 50x160.05 25.165x105.33 | No Lease | | 117,000 00 | 7,020 00 |
| | John O'Malley, Jr | | 1 | 52 | Dec. 30, 1882 | May 8, 1885 | | 14,000 00 | 840 00 |
| | Margaret Hertz..... | | 1 | 52 | Dec. 30, 1882 | May 8, 1885 | | 20,000 00 | 1,200 00 |
| | Edward H. Van Ingen..... | | 8 | 52 | Feb. 13, 1880 | May 8, 1885 | | 40,000 00 | 2,400 00 |
| Estate of John Delaney..... | North 1/2 of | | 8 | 113 | Apr. 27, 1880 | May 8, 1885 | | 10,000 00 | 603.96 |
| | South 1/2 of lot 8 | | | | | | | | |
| | and all | | 11 | 113 | May 8, 1880 | May 8, 1885 | | 30,000 00 | 1,803.96 |
| John Mackin | North 1/2 of | | 10 | 113 | May 8, 1880 | May 8, 1885 | | 25,000 00 | 1,500 00 |

STATEMENT OF FINANCES

REAL ESTATE BELONGING TO SCHOOL FUND—Continued.

| LESSEE. | DESCRIPTION. | Sub-Lot. | Lot. | Blk. | Size of Lot. | Date of Lease. | Expiration of Lease. | Appraised Valuation of 1885. | Annual Rental to May 8, 1885. |
|---|-------------------------------------|----------|-------------------------|------|---------------|----------------|----------------------|------------------------------|-------------------------------|
| Charles W. Lasher. | S ½ of. | | 10 | 113 | 25x105.33 | Feb. 13, 1879 | May 5, 1885. | \$25,000 00 | \$ 1,500 00 |
| Fire Department | | | 14 & N. 10.67 ft. of 17 | 113 | 60.67x105.33 | No Lease. | | 24,268 00 | 1,456 08 |
| James Goggin. | S. 39 17-100 ft. of Lot 17 and all. | | 16 | 113 | 50x105.33 | May 8, 1878. | May 8, 1885. | * | * |
| Police Department. | | | | | | | | | |
| James Goggin. | Part of | | 20 and 23 | 113 | 138.92x105.33 | No Lease. | | 100,000 00 | 6,000 00 |
| Nat'l State Deposit Co. | East ½ of | | 21 and 22 | 113 | 99.81x105.33 | June 8, 1875. | May 8, 1885. | * | * |
| Joseph E. Otis. | West ¾ of | | 5 and 6 | 119 | 95x192 | June 9, 1881. | July 1, 1931. | † | 29,700 00 |
| George L. Otis. | | | 1 and 2 | 142 | 48x80 | May 8, 1880. | May 8, 1885. | 425,000 00 | 25,500 00 |
| Wilhelmina Schwarz | | | 1 and 2 | 142 | 40x48 | May 8, 1880. | May 8, 1885. | 140,000 00 | 8,400 00 |
| Estate of Alice Philbin | | | 3 | 142 | 24x120 | May 8, 1880. | May 8, 1885. | 160,000 00 | 9,600 00 |
| Henry Weil | | | 4, 5 and 6 | 142 | 72x120 | May 8, 1880. | May 8, 1885. | 150,000 00 | 27,000 00 |
| Rosalie Cavanna. | | | 7 | 142 | 24x120 | Jan. 10, 1881. | May 8, 1885. | 150,000 00 | 9,000 00 |
| The McVicker Theatre Co | | | 8 | 142 | 24x120 | May 8, 1880. | May 8, 1885. | 170,000 00 | 10,200 00 |
| The Tribune Co. | | | 9, 10 and 11 | 142 | 81.48x192 | May 8, 1880. | May 8, 1885. | 450,000 00 | 27,000 00 |
| John Mackin. | | | 12, 13 and 14 | 142 | 72x120 | May 8, 1880. | May 8, 1885. | 500,000 00 | 30,000 00 |
| Andrew Cummings. | | | 15 and 17 | 142 | 48x120 | May 8, 1880. | May 8, 1885. | 168,000 00 | 10,080 00 |
| Andrew Cummings. | | | 16 | 142 | 24x120 | May 8, 1880. | May 8, 1885. | 84,000 00 | 5,040 00 |
| Alice F. Chambers and | | | 18 nd 19 | 142 | 48x120 | May 8, 1880. | May 8, 1885. | 190,000 00 | 11,400 00 |
| Ava W. Farwell. | | | 20 and 21 | 142 | 48x120 | May 8, 1880. | May 8, 1885. | 187,000 00 | 11,220 00 |
| Caroline F. Wilson | Lot 22 & N. 16 ft. of | | 23 | 142 | 40x120 | May 8, 1880. | May 8, 1885. | 133,000 00 | 7,980 00 |
| Daniel F. Crilly | South 8 ft. of Lot 23 and all of | | 24 to 27 inc. 28 and 29 | 142 | 104x120 | May 8, 1880. | May 8, 1885. | 540,000 00 | 32,400 00 |
| Estate of James J. Gore. | | | | 142 | 54.32x192 | May 8, 1880. | May 8, 1885. | 230,000 00 | 13,800 00 |
| J. H. Van Vliessen, Executor and Trustee of | | | | | | | | | |
| Catherine Boomer. | | | 30 | 142 | 27.16x192 | May 8, 1880. | May 8, 1885. | 110,000 00 | 6,600 00 |
| David L. Streeter. | | | 31 | 142 | 24x120 | May 8, 1880. | May 8, 1885. | 165,000 00 | 9,900 00 |
| George B. Streeter. | | | 32 | 142 | 24x120 | May 8, 1880. | May 8, 1885. | 150,000 00 | 9,000 00 |
| Thomas G. Otis. | | | 33 | 142 | 24x120 | May 8, 1880. | May 8, 1885. | 150,000 00 | 9,000 00 |
| Lucius B. Otis. | | | 34 | 142 | 24x120 | May 8, 1880. | May 8, 1885. | 150,000 00 | 9,000 00 |
| Lucius B. Otis. | | | 35 | 142 | 24x120 | May 8, 1880. | May 8, 1885. | 150,000 00 | 9,000 00 |
| Lucius B. Otis. | | | 36 | 142 | 24x120 | May 8, 1880. | May 8, 1885. | 160,000 00 | 9,600 00 |
| Lucius B. Otis. | | | 37 | 142 | 24x120 | May 8, 1880. | May 8, 1885. | 200,000 00 | 12,000 00 |
| Lucius B. Otis. | | | 38 | 142 | 24x120 | May 8, 1880. | May 8, 1885. | 240,000 00 | 14,400 00 |
| Russell, Mather & Roberts' Addition. | | | | | | | | | Annual rent to May 8, 1905. |
| Wacker & Birk Brewing and Malting Company. | North ½ of | | 14 | 60 | 20x150 | June 3, 1885. | May 8, 1935. | 3,500 00 | \$210 00 |

| | C. T. Sub of S. E. Fr. $\frac{1}{4}$ Sec. 21 T. 39, R. 14. | | 8, 9, 12, 13 | 26 | 200x124.6 | Jan. 1, 1888. | Appraised valuation of 1893. | Annual rental to Jan. 1, 1896. \$2,050 00 |
|-------------------|---|--|--|----|--|----------------|------------------------------------|--|
| George B. Weise | H. M. Thompson's Sub of W. $\frac{1}{2}$ N. E. $\frac{1}{4}$ Sec. 1, T. 39, R. 13. | | 7 to 10 inc. | 5 | 100x125 | Not Leased. | Jan. 1, 1888. | |
| *Not leased | | | | | | | | |
| * | | | | | | | | |
| *Not leased | | | 39 to 42 inc. | 5 | 25x128.89 25x128.78 25x128.78 25x128.67 | Not Les'd. | | |
| * | | | | | | | | |
| *Not leased | | | 41 and 42 | 6 | 50x125 | Not Leased. | | |
| | Colvin's Sub. of S. E. $\frac{1}{4}$ of N. W. $\frac{1}{4}$ Sec. 36, T. 38, R. 13. | | 6 to 9, 12, 18 19, 20, 21 and 44 to 50 | 2 | | | | |
| *Not leased | | | 15 to 22 23 to 34 35 to 44 | 3 | | | | |
| | Outside School Fund Property. | | Town | R. | | | | Annual rental. |
| *Not leased | | | | | | | | |
| John Boldt | W. $\frac{1}{2}$ S. W. $\frac{1}{4}$ | | | 12 | 80 acres | Oct. 30, 1890. | Nov. 8, 1905. | \$100 00 |
| John Ahn | E. $\frac{1}{2}$ of S. E. $\frac{1}{4}$ | | | 13 | 80 acres | Jan. 15, 1894. | Feb. 28, 1899. | 200 00 |
| George Mulderink | E. $\frac{1}{2}$ of N. W. $\frac{1}{4}$ | | | 13 | 80 acres | Jan. 15, 1894. | Feb. 28, 1899. | 200 00 |
| John Zeimet. | W. $\frac{1}{2}$ of N. W. $\frac{1}{4}$ | | | 13 | 80 acres | Jan. 15, 1894. | Feb. 28, 1899. | 200 00 |
| Henry Stevers | W. $\frac{1}{2}$ of S. W. $\frac{1}{4}$ | | | 13 | 80 acres | Mch. 1, 1894. | Feb. 28, 1899. | 120 00 |
| | Block 2 | | | 13 | 9.35 acres | | | |
| | Block 5 | | | 13 | 9.85 acres | | | |
| P. S. Peterson | Block 12 | | | 13 | 10 acres | Mch. 1, 1894. | Feb. 28, 1899. | 210 00 |
| | Block 20 | | | 13 | 10 acres | | | |
| | Block 21 | | | 13 | 10 acres | | | |
| Not leased | W. $\frac{1}{2}$ of N. W. $\frac{1}{4}$ | | | 13 | 80 acres | | | |
| | E. $\frac{1}{2}$ of S. E. $\frac{1}{4}$ | | | 13 | 80 acres | | | |
| Peter Schafer | N. E. $\frac{1}{4}$ of S. W. $\frac{1}{4}$ | | | 14 | 80 acres | June 1, 1892 | Dec. 31, 1898. | 600 00 |
| Charles Engstrand | Hegewisch's Sub | | | 10 | 40 acres | Oct. 1, 1896. | Oct. 1, 1901. | 60 00 |
| Mary Brilllett | Hough & Reed's | | 55 & 56 | 4 | | Jan. 1, 1897. | Dec. 1, 1897. | 60 00 |
| *Not leased | Norwood Park | | 2, 3, 4 & 24 | 1 | | | 2,000 00 | |

* Belongs to Income Account of School Fund. The proceeds of these lots when disposed of to apply to payment of salaries of Teachers. ** Revaluation Clause in Lease waived. Rental of Daily News Leasehold to be \$14,400 after May 8, 1900. † Old Wentworth Avenue School Property. ‡ Appraised of 1886, and annual rental to July 1, 1898. Includes six (6) per cent. upon \$15,000.00, the appraised value of the old Postoffice Building, said valuation of \$15,000.00 being for the entire term of this lease.

VALUATION

The following is a statement of the Taxable Real Estate and

| Mayors. | When Elected. | Census— By Whom Taken. | Population. |
|---------------------------|---------------|---------------------------|-------------|
| William B. Ogden | May 2, 1837 | City. | 4,170 |
| Buckner S. Morris | March 6, 1838 | ..... | ..... |
| B. W. Raymond | March 5, 1839 | ..... | ..... |
| Alexander Lloyd | March 3, 1840 | U. S. | 4,479 |
| Francis C. Sherman | March 5, 1841 | ..... | ..... |
| Benjamin W. Raymond | March 7, 1842 | ..... | ..... |
| Augustus Garrett | March 7, 1843 | City. | 7,580 |
| A. S. Sherman | March 7, 1844 | ..... | ..... |
| Augustus Garrett | March 5, 1845 | State. | 12,088 |
| John P. Chapin | March 3, 1846 | City. | 14,169 |
| James Curtis | March 2, 1847 | City. | 16,859 |
| James H. Woodworth | March 7, 1848 | City. | 20,023 |
| James H. Woodworth | March 6, 1849 | City. | 23,047 |

| Mayors. | When Elected. | Census —by Whom Taken. | Popu- lation. | South Division. | | West |
|------------------------------|------------------|---------------------------------|------------------|------------------------------|---------------------------------------|------------------------------|
| | | | | Valuation Real Estate. | Valuation of pers'nal property. | Val'ation Real Estate. |
| James Curtis | Mar. 5, 1850 | U. S. | 28,269 | \$ 3,401,512 | \$ 1,232,214 | \$ 1,326,271 |
| Walter S. Gurnee | Mar. 4, 1851 | ..... | ..... | 3,933,662 | 1,350,656 | 1,724,452 |
| Walter S. Gurnee | Mar. 2, 1852 | Estim. | 48,000 | 4,414,466 | 1,841,280 | 2,357,642 |
| Charles M. Gray | Mar. 14, 1853 | City | 60,652 | 6,594,465 | 3,003,444 | 4,321,909 |
| Isaac L. Miliken | Mar. 13, 1854 | Estim. | 75,000 | 8,657,840 | 4,657,546 | 7,443,799 |
| Levi D. Boone | Mar. 8, 1855 | State | 80,000 | 10,400,279 | 4,423,527 | 7,795,931 |
| Thomas Dyer | Mar. 10, 1856 | City | 84,113 | 13,424,370 | 4,480,941 | 8,330,150 |
| John Wentworth | Mar. 3, 1857 | ..... | ..... | 15,330,900 | 5,663,670 | 9,181,274 |
| John C. Haines | Mar. 2, 1858 | ..... | ..... | 15,546,006 | 4,441,630 | 9,544,805 |
| John C. Haines | Mar. 1, 1859 | ..... | ..... | 15,967,100 | 4,842,291 | 9,574,253 |
| John Wentworth | Mar. 6, 1860 | U. S. | 109,206 | 16,015,923 | 4,632,160 | 9,875,750 |
| Julian S. Rumsey | April 16, 1861 | ..... | ..... | 16,009,742 | 3,733,838 | 9,965,360 |
| Francis C. Sherman | April 15, 1862 | City | 138,186 | 16,165,540 | 4,181,580 | 10,160,510 |
| Francis C. Sherman | April 21, 1863 | ..... | ..... | 18,807,321 | 5,615,212 | 10,528,462 |
| Francis C. Sherman ..... | ..... | City | 169,353 | 19,948,868 | 9,030,955 | 11,232,042 |
| John B. Rice | April 18, 1865 | State | 178,492 | 24,001,511 | 16,925,363 | 13,213,243 |
| John B. Rice ..... | ..... | City | 200,418 | 37,460,007 | 14,991,229 | 20,406,226 |
| John B. Rice | April 16, 1867 | ..... | ..... | 73,133,320 | 40,640,215 | 44,701,700 |
| John B. Rice ..... | ..... | City | 252,054 | 85,313,610 | 41,952,950 | 59,657,620 |
| Roswell B. Mason | Nov. 2, 1869 | ..... | ..... | 101,286,390 | 39,986,536 | 75,790,935 |
| Roswell B. Mason ..... | ..... | U. S. | 306,605 | 105,088,780 | 38,625,670 | 81,284,400 |
| Joseph Medill | Nov. 7, 1871 | ..... | ..... | 110,661,940 | 38,707,360 | 87,644,630 |
| Joseph Medill ..... | ..... | City | 367,396 | 114,273,540 | 27,434,340 | 95,768,880 |
| Harvey D. Colvin | Nov. 4, 1873 | ..... | ..... | 126,669,660 | 35,660,415 | 102,827,480 |
| Harvey D. Colvin ..... | ..... | City | 395,408 | 123,366,620 | 33,368,290 | 100,845,230 |
| Harvey D. Colvin ..... | ..... | ..... | ..... | 163,041,441 | *33,217,059 | 148,566,069 |
| Monroe Heath | July 12, 1876 | City | 407,661 | *63,277,310 | *26,172,921 | 149,914,387 |
| Monroe Heath ..... | ..... | City | ..... | 155,453,480 | *23,321,738 | 144,199,520 |
| Monroe Heath ..... | ..... | City | 436,731 | 149,485,276 | *19,672,590 | 138,654,273 |
| Carter H. Harrison | April 1, 1879 | ..... | ..... | 140,792,201 | *17,733,478 | 135,983,012 |
| Carter H. Harrison ..... | ..... | U. S. | 503,298 | 141,666,451 | *19,500,025 | 134,871,482 |
| Carter H. Harrison ..... | ..... | ..... | ..... | 141,900,456 | 19,283,962 | 134,410,247 |
| Carter H. Harrison ..... | ..... | City | 560,693 | 145,502,908 | *20,002,445 | 135,863,654 |
| Carter H. Harrison ..... | ..... | ..... | ..... | 150,097,793 | *21,477,626 | 136,986,133 |
| Carter H. Harrison ..... | ..... | City | 629,985 | *52,179,743 | *21,613,565 | 138,594,383 |
| Carter H. Harrison ..... | ..... | ..... | ..... | 152,659,347 | *21,964,997 | 139,208,806 |
| Carter H. Harrison ..... | ..... | City | 693,861 | 161,108,532 | 24,025,471 | 144,757,133 |
| John A. Roche ..... | ..... | ..... | ..... | 161,751,262 | *26,288,658 | 144,463,663 |
| John A. Roche ..... | ..... | City | 802,651 | *61,814,611 | *26,723,787 | 144,478,416 |
| DeWitt C. Cregier ..... | ..... | ..... | ..... | 183,088,147 | *36,116,184 | 148,585,736 |
| DeWitt C. Cregier ..... | ..... | U. S. | 1,105,540 | 196,749,431 | *36,881,903 | 151,692,422 |
| Hempstead Washburne ..... | ..... | ..... | ..... | 117,983,233 | *40,779,253 | 159,653,940 |
| Hempstead Washburne ..... | ..... | City | 1,438,010 | *113,139,325 | *41,262,681 | 153,697,921 |
| Carter H. Harrison ..... | ..... | ..... | ..... | *111,137,940 | *44,080,872 | 153,502,579 |
| Geo. B. Swift, pro tem | Nov. 4, 1893 | ..... | ..... | ..... | ..... | ..... |
| John P. Hopkins | Dec. 19, 1893 | City | 1,567,727 | *111,480,490 | *42,789,985 | 154,556,560 |
| John P. Hopkins ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| George B. Swift ..... | ..... | City | 1,616,635 | *112,741,234 | *38,662,475 | 154,628,835 |
| George B. Swift ..... | ..... | ..... | ..... | 113,472,359 | *35,831,988 | 156,245,270 |

* Includes total railroad valuation, real and personal. † Equalized valuation.—On May 15, 1837, the City Treasurer of the City of Chicago received from the was compiled from the annual statements of 1838 to 1856, inclusive, as submitted by inclusive, from the annual statements of the City Comptroller. The above includes

AND INCOME.

Personal Property, and the Taxes levied from 1837 to 1896, inclusive.

| Valuation Real Estate. | Valuation Per- sonal Property. | Total Valuation. | Increase. | Total Tax. | Floating Liabilities. |
|---------------------------|-----------------------------------|---------------------|-------------|-------------|--------------------------|
| \$ 236,842 | | \$ 236,842 | | \$ 5,905 15 | |
| 235,996 | | 235,996 | | 8,849 36 | \$ 9,996 54 |
| 94,803 | | 94,803 | | 4,664 55 | 7,182 25 |
| 94,437 | | 94,437 | | 4,721 85 | 6,559 63 |
| 127,024 | \$ 39,720 | 166,747 | | 10,004 67 | 12,387 67 |
| 108,757 | 42,585 | 151,342 | | 9,181 27 | 16,372 01 |
| 962,221 | 479,093 | 1,441,314 | | 8,647 89 | 12,655 40 |
| 1,992,095 | 771,186 | 2,763,281 | \$1,321,967 | 17,166 24 | 9,795 35 |
| 2,273,171 | 791,851 | 3,065,022 | 301,747 | 11,077 58 | 10,691 27 |
| 3,364,425 | 857,231 | 4,221,656 | 1,456,634 | 15,825 80 | 16,045 41 |
| 4,995,466 | 853,704 | 5,849,190 | 1,327,514 | 18,159 01 | 13,179 89 |
| 4,998,266 | 1,302,174 | 6,300,440 | 451,270 | 22,051 54 | 20,338 38 |
| 5,181,637 | 1,495,047 | 6,676,684 | 376,244 | 30,045 09 | 36,333 20 |

| Division. | North Division. | | Total Valuation. | Increase. | Total Tax. | Bond d Indebted- ness. |
|------------------------------------|---------------------------|------------------------------------|---------------------|-------------|---------------|------------------------------|
| Valuation Personal Property. | Valuation Real Estate. | Valuation Personal Property. | | | | |
| \$ 203,885 | \$ 951,182 | \$ 98,104 | \$ 7,222,249 | \$ 543,365 | \$ 25,270 87 | \$ 93,395 |
| 252,154 | 1,136,148 | 155,045 | 8,562,717 | 1,342,468 | 63,385 87 | |
| 213,635 | 1,418,664 | 214,730 | 10,463,414 | 1,900,697 | 76,943 96 | 126,035 |
| 398,642 | 2,214,303 | 309,068 | 16,841,831 | 6,378,319 | 135,662 68 | 189,670 |
| 647,906 | 2,890,105 | 289,053 | 24,392,239 | 7,550,408 | 499,081 64 | 248,666 |
| 561,775 | 3,441,280 | 370,091 | 20,992,873 | 2,600,654 | 206,209 03 | 328,000 |
| 686,150 | 4,137,788 | 676,785 | 31,736,084 | 3,743,191 | 396,652 39 | 435,000 |
| 687,693 | 4,795,454 | 496,290 | 36,335,281 | 4,599,197 | 572,046 00 | 535,000 |
| 782,754 | 5,084,514 | 592,023 | 35,991,732 | | 430,190 00 | |
| 529,426 | 5,190,960 | 449,350 | 36,553,380 | 561,648 | 543,614 00 | 1,855,000 |
| 638,137 | 5,306,462 | 585,080 | 37,053,512 | 500,132 | 573,315 29 | 2,336,000 |
| 633,508 | 5,249,647 | 670,285 | 36,352,380 | | 550,968 00 | 2,362,000 |
| 661,285 | 5,261,495 | 707,435 | 37,139,845 | 787,465 | 564,038 06 | 3,028,000 |
| 1,192,710 | 5,807,465 | 716,150 | 42,677,324 | 5,527,749 | 853,346 00 | 3,422,500 |
| 1,443,060 | 5,967,118 | 1,120,754 | 48,732,782 | 6,065,458 | 974,665 64 | 3,544,500 |
| 1,146,330 | 6,849,745 | 2,572,985 | 64,709,177 | 15,976,395 | 1,294,183 50 | 3,701,000 |
| 2,773,140 | 8,628,883 | 1,693,765 | 85,953,250 | 21,244,073 | 1,719,061 05 | 4,369,500 |
| 7,372,235 | 23,610,900 | 5,568,474 | 195,026,844 | 109,073,594 | 2,518,472 00 | 4,757,500 |
| 8,567,060 | 29,519,430 | 5,236,330 | 230,247,000 | 35,220,156 | 3,223,457 80 | 6,484,500 |
| 9,165,060 | 34,293,900 | 5,502,059 | 266,920,000 | 32,777,880 | 3,990,373 20 | 7,882,500 |
| 8,499,610 | 37,272,420 | 5,217,670 | 275,986,550 | 9,961,670 | 4,139,798 60 | 11,041,000 |
| 9,355,560 | 38,592,080 | 4,784,900 | 289,746,470 | 13,759,920 | 2,897,564 70 | 14,106,000 |
| 15,507,710 | 29,112,470 | 2,100,490 | 283,197,430 | | 4,262,961 45 | 13,544,000 |
| 10,951,660 | 33,472,680 | 2,491,100 | 312,072,995 | 27,875,575 | 5,617,313 91 | 13,478,000 |
| 9,294,100 | 34,389,460 | 2,463,440 | 303,705,140 | | 5,466,692 54 | 13,456,000 |
| *9,384,216 | 16,493,465 | *3,261,996 | †173,764,246 | | 5,108,981 40 | 13,457,000 |
| *7,575,482 | †18,083,763 | *3,067,315 | †168,037,178 | | 4,046,805 80 | 13,436,000 |
| *6,722,270 | 16,429,533 | *2,273,615 | †148,400,148 | | 4,013,410 44 | 13,364,000 |
| *6,121,204 | 16,280,504 | *1,767,581 | †131,981,436 | | 3,778,856 80 | 13,057,000 |
| *6,918,693 | †13,717,016 | *2,165,635 | †117,970,135 | | 3,776,888 19 | 13,043,000 |
| *6,658,841 | †12,994,022 | *1,942,822 | †117,133,643 | | 3,899,126 98 | 12,752,000 |
| *5,262,552 | †12,788,342 | *1,693,887 | †119,151,951 | | 4,136,708 38 | 12,752,000 |
| *7,452,908 | †14,513,438 | *2,023,184 | †125,358,537 | | 4,227,402 98 | 12,752,000 |
| *8,163,172 | †14,512,861 | *1,992,919 | †132,230,504 | | 4,540,506 13 | 12,751,500 |
| *8,055,480 | †14,512,861 | *2,051,492 | †137,326,980 | | 4,872,456 60 | 12,751,500 |
| *8,458,456 | †15,278,729 | *2,387,958 | †139,958,292 | | 5,152,366 03 | 12,695,500 |
| *8,854,980 | †17,114,458 | *2,635,558 | †158,496,132 | | 5,368,409 76 | 12,588,500 |
| *8,936,068 | †16,954,530 | *2,810,354 | †161,204,535 | | 5,602,712 56 | 12,588,500 |
| *8,043,577 | †16,989,320 | *2,582,005 | †160,641,727 | | 5,723,067 75 | 12,561,500 |
| *9,431,111 | †20,960,110 | *2,912,731 | †201,104,019 | | 6,326,561 21 | 13,554,900 |
| *8,744,203 | †22,111,995 | *3,174,308 | †219,354,368 | | 9,558,334 80 | 13,545,400 |
| *9,052,500 | †25,716,618 | *3,414,024 | †256,599,574 | | 10,453,270 41 | 13,530,350 |
| *8,542,632 | †23,777,390 | *3,292,189 | †243,732,138 | | 12,142,448 75 | †18,515,450 |
| *9,240,336 | †24,658,601 | *3,190,331 | †245,790,359 | | 11,810,959 69 | †18,426,450 |
| *10,263,805 | †24,926,307 | *3,415,288 | †247,425,442 | | 12,267,643 62 | †17,722,950 |
| *9,419,195 | †25,128,773 | *2,896,313 | †243,476,825 | | 14,239,685 13 | †17,188,950 |
| *9,962,889 | †25,967,246 | *2,877,534 | †244,357,286 | | 12,290,145 21 | †17,078,950 |

tion of State Board of Equalization. † Includes World's Fair Bonds.

Treasurer of the Town of Chicago, in cash, \$2,814.26. The City debt, as noted above, the Finance Committee of those years to the Common Council, and from 1857 to 1890, territories lately annexed. \$ Appointed by Council.

EQUALIZED VALUATION

Of the Real Estate, Personal Property and Railroads for the Year 1896

| <i>Towns.</i> | <i>Real Estate.</i> | <i>Personal Property.</i> | <i>Railroads.</i> |
|-------------------|---------------------|---------------------------|-------------------|
| North | \$19,246,635 00 | \$ 2,041,516 00 | \$ 267,342 00 |
| South..... | 76,241,402 00 | 23,636,089 00 | 2,282,431 00 |
| West | 53,712,615 00 | 5,941,140 00 | 3,610,053 00 |
| Calumet .....S. | 1,105,066 00 | 42,545 00 | 573,941 00 |
| Evanston .....N. | 824,659 00 | 26,838 00 | 34,186 00 |
| Hyde Park .....S. | 20,988,216 00 | 1,330,561 00 | 2,926,310 00 |
| Jefferson .....W. | 2,374,156 00 | 61,200 00 | 325,793 00 |
| Lake .....S. | 15,137,675 00 | 1,486,723 00 | 3,553,388 00 |
| Lake View .....N. | 5,895,952 00 | 386,470 00 | 121,182 00 |
| Maine .....W. | 1,732 00 | 301 00 | 2,209 00 |
| Niles .....W. | 12,197 00 | ..... | ..... |
| Norwood .....W. | 144,570 00 | 5,916 00 | 16,277 00 |
| | <hr/> | <hr/> | <hr/> |
| | \$195,684,875 00 | \$34,959,299 00 | \$13,713,112 00 |

RECAPITULATION.

| | |
|------------------------|------------------|
| Real estate | \$195,684,875 00 |
| Personal property..... | 34,959,299 00 |
| Railroads | 13,713,112 00 |
| | <hr/> |
| | \$244,357,286 00 |

LIST OF COMPTROLLERS.

In accordance with Section 9 of an act to amend the act entitled "An Act to Reduce the Law Incorporating the City of Chicago, and the several acts amendatory thereof, into one act, and to amend the same," approved February 14, 1851, the following-named gentlemen have been appointed to, and filled the office of City Comptroller.

| | APPOINTED. | | | |
|---------------------|------------|---|---|----------------|
| SAMUEL D. WARD, | - | - | - | March 19, 1857 |
| S. S. HAYES, | - | - | - | May 19, 1862 |
| WALTER KIMBALL, | - | - | - | May. 8, 1863 |
| GEORGE TAYLOR, | - | - | - | Dec. 20, 1869 |
| AUGUSTUS H. BURLEY, | - | - | - | Feb. 12, 1872 |
| S. S. HAYES, | - | - | - | Dec. 8, 1873 |
| JOHN A. FARWELL, | - | - | - | June 22, 1876 |
| THEODORE T. GURNEY, | - | - | - | May 12, 1879 |
| CHAS. H. SCHWAB, | - | - | - | Aug. 5, 1886 |
| AUGUSTUS H. BURLEY, | - | - | - | April 18, 1887 |
| WILLIAM J. ONAHAN, | - | - | - | April 18, 1889 |
| HORATIO N. MAY, | - | - | - | April 27, 1891 |
| OSCAR D. WETHERELL, | - | - | - | April 14, 1893 |
| W. K. ACKERMAN, | - | - | - | Jan. 3, 1894 |
| HIRAM J. JONES, | - | - | - | Nov. 19, 1894 |
| OSCAR D. WETHERELL, | - | - | - | April 8, 1895 |

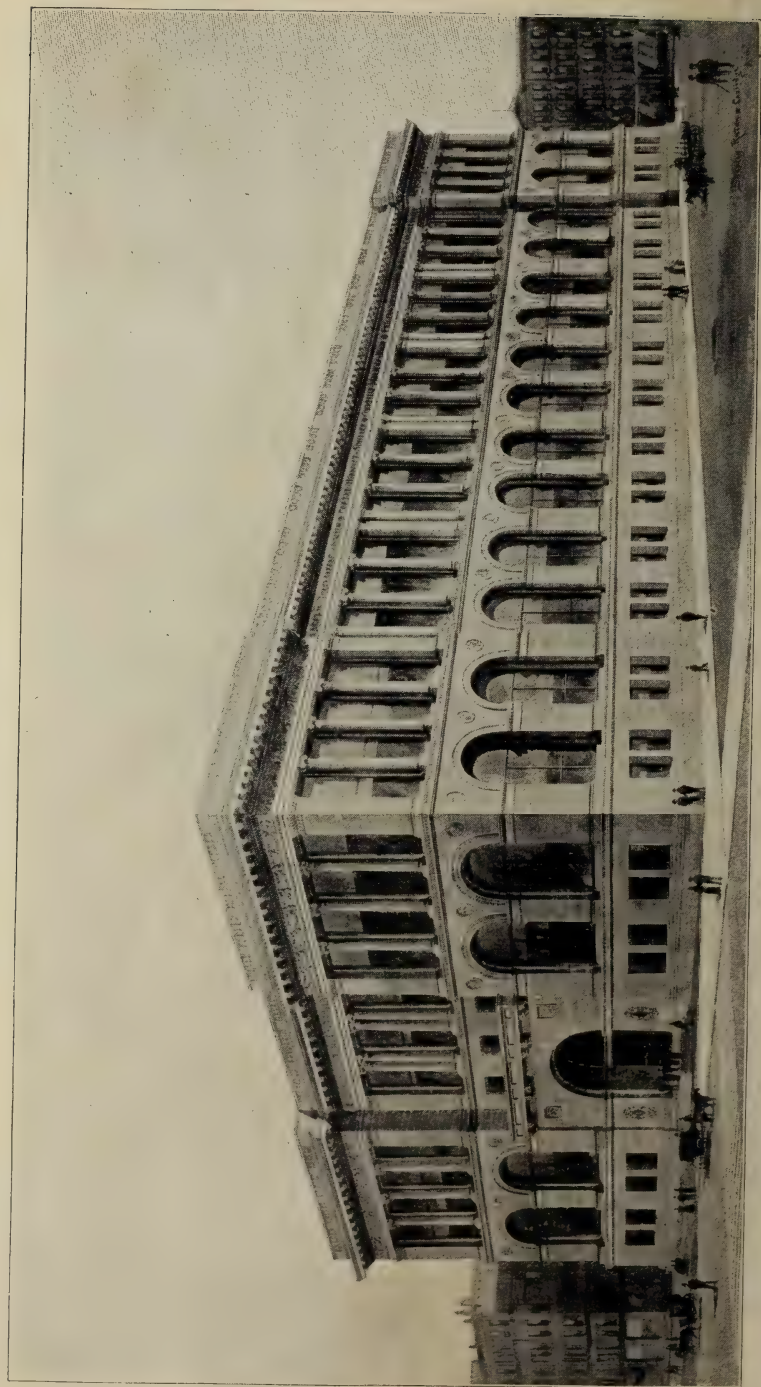
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Section II.



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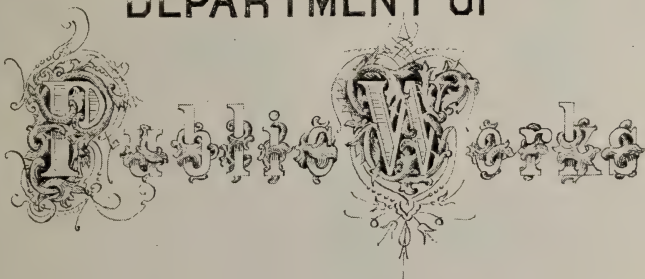
Mayor's Annual Message

AND

TWENTY-FIRST ANNUAL REPORT

OF THE

DEPARTMENT OF



TO THE

City Council of the City of Chicago
for the
fiscal year ending Dec. 31st
1896

MESSAGE OF
MAYOR SWIFT

MESSAGE OF MAYOR SWIFT.

*To the Honorable, the City Council of the
City of Chicago:*

GENTLEMEN—At this closing hour of my administration it is proper for me to render some account of my stewardship. A brief review of the past is sometimes advisable, as well as just, for it affords aid in preparing to meet the future. Before my election two years ago the people of this City were promised that so far as lay in my power they should have a business-like administration of their municipal affairs. It is now my firm conviction that every promise then made has been faithfully kept. Wherever there has been failure to accomplish entirely satisfactory results, the failure has been due to adverse conditions and not to lack of proper effort or intention. It surely can be asserted truthfully and without hesitation, that our municipal affairs are to-day upon a distinctly higher plane than they were two years ago when committed to my charge. There has been a long step forward. [In every department there has been an honest and an earnest effort to manage the City's affairs economically and efficiently.]

It is impossible, and it would be undesirable, to attempt here any detailed showing of the work done and the results accomplished in the last two years; but some general showing of what has been done will be found interesting, and it should be made in justice to myself, as well as to the heads of the

various departments. Special attention may properly be invited to the successful inauguration of the merit system in making appointments under the new civil service law ; to the complete divorce of the Police Department from active participation in politics ; to the final settlement of the lake front controversy ; to the material progress made in the important and perplexing problem of abolishing railway crossings upon the surface of our streets ; to the novel and highly satisfactory employment of the police force as an agency for distributing food and clothing to the suffering poor during an emergency which demanded immediate action ; to the very successful work of the Health Department in various directions, such as the securing of a pure supply of milk and of ice, and the establishment of a new isolation hospital worthy of our City ; to the different measures adopted for obtaining a larger and better water supply, including the partial construction of new water tunnels, the making of provisions for new pumping stations and additional machinery, and the adoption of a system of intercepting sewers for diverting our sewage from the lake and turning it into its proper receptacle, the new drainage canal ; to the correction of flagrant abuses in special assessments, both as affecting the property of our citizens and the revenues of our City ; to the reduction of expenditures in nearly all the departments, with an accompanying increase in their actual work ; [to the lighting of our public streets at a lessened expenditure] and during the last year without incurring indebtedness therefor ; and generally to the successful management of our City finances whereby we have been enabled to keep within our income for the first time in many years, and at the same time improve the public service.

CIVIL SERVICE.

In response to a strong public sentiment the Legislature of this State passed an Act to regulate the civil service of municipalities adopting it, which Act was approved by the Governor March 20, 1895. At the following April election the people of this City by popular vote adopted the law and thus made it obligatory upon this administration to inaugurate the merit system ordained by it within ninety days. [The system went into effect July 1, 1895, and (in the main) its workings have been satisfactory.] While probably not free from defects it has yet accomplished so much, and is in every way so decided an improvement over the former method of making appointments through personal favoritism or political influence, that it is difficult to understand how any right thinking citizen should now desire to see it abolished. In the year 1896, which embraced the formative period of the Commission's labors, and which necessarily involved a vast amount of preliminary work, the total expenses of the Commission were only a trifle in excess of \$31,000. The system is now established on a solid working basis. The earnest and able Commissioners have labored with zeal and faithfulness in the discharge of their duties, and have succeeded in their task with perhaps less friction than was to be expected in the introduction of so radical a change over former methods of making appointments. During the year just closed a total of 24,500 persons have taken out applications for entrance to the various branches of the classified service, and over 7,000 of these have returned their applications properly filled out and been entered on the books of the Commission. Of this number over 4,000 were examined, and nearly 2,500 successfully passed the required averages and were placed upon the eligible list awaiting appointment. In the same period 1,396 persons have been certified for appointment, substantially all of whom are now in the service of the City on probation.

The effect of the civil service law has been especially noticeable in helping to divorce the police from politics, while it has relieved the Mayor and heads of departments from the pressure of applicants for office, and left the executive officers free to attend to their public duties. It has likewise abolished the evil of compulsory political assessments, a burden to which City employes had long been subjected and which had grown to such proportions that some action was deemed necessary by the State Legislature to suppress it. The system provided by this law for making appointments and promotions in the public service is based solely upon the merit and fitness of the applicant as demonstrated by the result of his examination papers, in which the applicant is given a certain credit for past experience and a good record. That this is a marked improvement over the old methods by which appointments were made, can not be questioned ; nor can it be doubted that [the practical results of the system will be seen more and more, as time goes on, in the increased efficiency of the employes in all branches of the public service.]

FINANCES.

The fundamental, ever-present, and ever-perplexing embarrassment of this administration has been the question of finances. How to manage *satisfactorily* the affairs of this great and rapidly growing city upon an income utterly inadequate to its needs has been a problem practically defying solution. We started with the proposition that we proposed to live within our income and we have done it, but, in so doing, much had to be left undone, and much more had to be done imperfectly. Careful and systematic economy has been practiced, and in my judgment the revenues of the City have been

disbursed with rare prudence and judgment. The result has been to draw the attention of our people in an increased degree to the fact that some steps must be taken for providing a larger revenue to meet our municipal requirements. It has come to be quite generally seen that under the conditions prevailing in Chicago, no administration, however honest and efficient, can with the means at its disposal fully perform the public work which ought to be performed. There has been an earnest effort under this administration to administer the City's affairs efficiently and economically, but you will doubtless remember that each year you are compelled to cut down the annual appropriation between two and three million dollars below the aggregate amount which the heads of departments estimate as necessary to be expended.

Citizens sometimes complain that their taxes are high and are increasing, and they express surprise and doubt at the cramped financial condition of the City. Let me here call attention to the fact that there has been no increase in taxation for municipal purposes in this City for at least half-a-dozen years, but rather the contrary. Apart from the levy for interest upon the public debt, which can not increase, and the levies for school and library purposes, which we do not disburse, the tax for City purposes is two per cent. upon the assessed valuation of property. In 1891, immediately after the enlargement of the City by annexation, the assessed valuation was, in round figures, \$256,000,000, and in 1896 it was \$244,000,000. Here is a decrease of the City's tax revenue of approximately \$240,000. In the intervening years the assessment has varied slightly, but it has never amounted to \$250,000,000 since 1891. Meantime the City has been constantly growing. The truth is that the City's income from taxes has for years past been practically a fixed income, and that it

amounts to only about 35 per cent. of the total taxes collected. To put the matter a little more plainly, out of every dollar which a citizen pays for taxes only 35 cents goes to the City of Chicago for municipal purposes, and is expended by us; the balance of 65 cents goes for State, county, township, park, drainage and school taxes, etc., and it is in this balance that the increase occurs and is felt. Another truth is that the entire amount received by the City from taxes is considerably less than sufficient to support the Police and Fire Departments alone. For other municipal expenditures we are compelled to look to miscellaneous receipts, derived largely from licenses.

For our financial ills the present assessment system is primarily at fault, but even under the present system it is my belief that a great deal of property is insufficiently taxed or escapes taxation altogether, while it is doubtless true that some property is over-taxed. Last year a commission of gentlemen, well equipped for the work, made a valuation of down-town property at my instance and compared it with the assessments. The results shown were startling in many instances. If all taxable property could be made to bear its fair share of the public burden, and only its fair share, there would probably be no occasion for any general increase in the rate of taxation, but merely a more equitable distribution of the amount raised, and a larger and sufficient revenue to the City. This tax question is one that must be constantly discussed and ultimately solved if the municipal government is to keep pace with the demands upon it. If this were a full grown and finished city, the financial problem and the tax problem could be very differently viewed. But at the present time the City resembles a poor parent who must provide for a large family of growing children.

In recent years, prior to my administration, the difficulty of managing the City's affairs to the satisfaction of the

community upon its limited income led to the loose and improper practice of running into debt. In the last two years this indebtedness has not only not been increased, but it has been sensibly reduced. Its mere existence was an embarrassment, and in the early part of this administration an attempt was made to secure legislation from the State which would enable the City to fund it by issuing bonds. Notwithstanding a well defined public sentiment in favor of such legislation none was enacted. Resort was then necessarily had to the issuance of time warrants in anticipation of the collection of taxes, and their issuance has made it possible to carry on our municipal government. The subsequent collection of taxes and the practice of close economy have put us in position to redeem such warrants at the close of each fiscal year, and to pay our own current indebtedness.

Tables are presented herewith, giving a detailed showing of our finances. The general result will be best understood by the summarized statement that we have expended for the year 1896 \$49,000 less than was appropriated. That the bonded debt of the City has been reduced during the last two years \$644,000, and the floating indebtedness has been reduced in the same time nearly \$623,000. At the same time there has been a reduction in the pay rolls of over \$1,800,000.

The strongest comment to be made upon this showing is the fact that two years ago the City's warrants and vouchers were selling at a discount of about 15 per cent., while to-day they command a premium.

Due acknowledgment should be here made to the present Comptroller for the able assistance he has rendered in bringing about this result; also to the efficient Chairman of the Finance Committee.

The cash shortage or floating debt of the City on January 1, 1895, amounted to \$5,148,462.08. On December 31, 1896, the floating debt of the City was as follows :

| | | |
|---|-----------------|------------------------|
| Interest..... | \$ 514,937 95 | |
| Judgments (appropriated for)..... | 402,720 57 | |
| Judgments (not appropriated for)..... | 1,167,940 72 | |
| Pension Funds | 192,248 07 | |
| Sinking Funds..... | 1,205,952 65 | |
| Special Funds | 914,387 74 | |
| Special taxes for street intersections..... | 999,000 00 | |
| Accounts payable (miscellaneous)..... | 802,755 41 | |
| Time or Revenue Warrants..... | 2,470,287 85 | |
| Total | \$ 8,670,230 96 | |
| Less cash in treasury and bank..... | 4,146,163 70 | |
| Net floating debt | | \$ 4,524,067 26 |
| Add Water Certificates outstanding | | 1,500 00 |
| Floating debt, December 31, 1896..... | | <u>\$ 4,525,567 26</u> |

This shows a decrease in the floating debt during the last two years of \$622,894.82.

The moneys appropriated for corporate purposes, for the year 1896, were as follows :

| | | |
|---|------------------|------------------------|
| Equalized valuation of property..... | \$243,476,825 00 | |
| Two per cent. on same..... | | \$ 4,869,536 50 |
| Income from miscellaneous sources, mainly saloon licenses | | 3,655,772 16 |
| Department receipts, transfers and from special sources | | 1,194,601 47 |
| Total | | <u>\$ 9,719,910 13</u> |

The expenditures for the same period were as follows :

| | |
|--|--------------|
| City Cemetery | \$ 94 25 |
| City Clerk, Expense | 18,109 71 |
| Civil Service Commission..... | 31,399 84 |
| Contingent Fund | 4,396 84 |
| Costs and loss in collecting City taxes..... | 101,249 20 |
| Department Public Works..... | 1,926,979 64 |
| Election Expense | 222,627 33 |
| Fire Department..... | 1,548,486 76 |
| Health Department..... | 178,360 18 |
| House of Correction | 118,088 53 |
| Judgment Account | 428,823 88 |
| Legal Expense | 38,013 19 |
| Police Courts..... | 2,912 45 |

| | | |
|--|--------------|----|
| Police Fund | \$ 3,304,308 | 77 |
| Printing and Stationery..... | 7,422 | 43 |
| Salaries | 222,692 | 47 |
| Sewerage Fund..... | 338,970 | 18 |
| Street Lamp Fund—gas, oil, electric light..... | 1,062,545 | 11 |
| Transfers..... | 115,195 | 16 |
| Total expenditures | \$ 9,670,675 | 92 |
| Savings (unexpended balances of appropriations)... | 49,234 | 21 |

ASSETS AND LIABILITIES OF THE CITY OF CHICAGO,

December 31, 1896.

ASSETS.

| | | |
|---|--------------|----|
| Buildings, real estate, water works, etc..... | \$56,849,412 | 41 |
| Uncollected Taxes, 1896..... | 12,290,145 | 21 |
| Norwood Park Tax Certificates..... | 596 | 78 |
| Cash in bank | 526,561 | 57 |
| Cash in Treasury..... | 3,619,102 | 13 |
| Cash in paymaster's drawer | 500 | 00 |
| Uncollected Special Assessment Tax Warrants.... | 1,218,300 | 00 |
| Total | \$74,504,618 | 10 |

LIABILITIES.

| | | |
|--|---------------|----|
| Special Improvement Bonds..... | \$ 1,218,300 | 00 |
| Bonded debt..... | 17,078,950 | 00 |
| Water Certificates, 5 per cent..... | 1,500 | 00 |
| Trust Funds..... | 38,920 | 00 |
| Sinking Funds | 1,205,952 | 65 |
| Special Funds | 8,592,942 | 24 |
| Insurance Tax..... | 223 | 44 |
| Interest..... | 514,937 | 95 |
| Judgments (appropriation)..... | 402,720 | 57 |
| Suspense Account | 17,331 | 03 |
| Time or Revenue Warrants..... | 2,470,287 | 85 |
| Accounts Payable (miscellaneous)..... | 802,755 | 41 |
| Stock Account (surplus value realty over bonded debt)..... | 39,730,042 | 41 |
| *Surplus (general fund)..... | 2,429,754 | 55 |
| Total | \$ 74,504,618 | 10 |

*There are other liabilities not on the books of the City, as follows:

| | | |
|--|--------------|----|
| Special taxes for street intersections | \$ 999,000 | 00 |
| Judgments (unappropriated)..... | 1,167,940 | 72 |
| Due Pension Funds..... | 192,248 | 07 |
| Total..... | \$ 2,359,188 | 79 |

If these liabilities are not provided for by future taxation the surplus or general fund will be reduced to \$70,565.76.

Leaving aside the permanent assets, such as buildings and realty, the bonded debt and Stock Account (*i. e.*, surplus value of realty, etc., over bonded debt) and including all other obligations, the condition of the City is as follows :

ASSETS.

| | |
|---|------------------------|
| Uncollected Taxes, 1896 (in collection) | \$12,290,145 21 |
| Norwood Park Tax Certificates | 596 78 |
| Cash in bank | 526,561 67 |
| Cash in Treasury | 3,619,102 13 |
| Cash, petty, on hand..... | 500 00 |
| | <hr/> |
| | <u>\$16,436,905 69</u> |

LIABILITIES.

| | |
|---|------------------------|
| Sinking Funds | \$ 1,205,952 65 |
| Special Funds | 8,592,942 24 |
| Insurance Tax..... | 223 44 |
| Interest..... | 514,937 95 |
| Judgments (appropriated for). | 402,720 57 |
| Suspense Account | 17,331 03 |
| Time or Revenue Warrants..... | 2,470,287 85 |
| Accounts Payable, miscellaneous..... | 802,755 41 |
| Special Taxes for street intersections..... | 999,000 00 |
| Judgments (not appropriated for)..... | 1,167,940 72 |
| Due Pension Funds..... | 192,248 07 |
| Surplus..... | 70,565 76 |
| | <hr/> |
| | <u>\$16,436,905 69</u> |

From the above statement it can be readily seen that the uncollected taxes of 1896 due the City and in course of collection, together with the cash on hand, are sufficient to pay the entire indebtedness of the City, other than the bonded debt, leaving a surplus of \$70,565.76. The general statement shows that the permanent assets, *i. e.*, buildings, realty, etc., at cost, have a surplus value over the bonded debt of \$39,730,042.41. It is evident, therefore, that the actual financial strength of the corporation is excellent and that its embarrassments are mainly due to a lack of income to properly maintain the City.

FUNDED DEBT.

| | |
|---|-------------------------|
| City of Chicago 3½ per cent. bonds..... | \$ 135,000 00 |
| City of Chicago 4 per cent. bonds..... | 11,010,450 00 |
| City of Chicago 4½ per cent. bonds..... | 489,500 00 |
| City of Chicago 7 per cent. bonds..... | 1,242,000 00 |
| Water Loan 3½ per cent. bonds..... | 333,500 00 |
| Water Loan 3.65 per cent. bonds..... | 332,000 00 |
| Water Loan 4 per cent. bonds..... | 3,191,500 00 |
| Water Loan 6 per cent. bonds..... | 132,000 00 |
| Town of Lake Water bonds..... | 90,000 00 |
| Hyde Park Water bonds..... | 50,000 00 |
| Lake View Water bonds..... | 73,000 00 |
| Total | <u>\$ 17,078,950 00</u> |

SINKING FUNDS.

| | |
|---|-------------------------|
| General Sinking Funds..... | \$ 617,886 94 |
| River Improvement Sinking Fund..... | 235,601 45 |
| School Sinking Fund..... | 153,672 25 |
| Sewerage Sinking Fund..... | 198,792 01 |
| Payable from Water revenues..... | <u>4,202,000 00</u> |
| Total | <u>\$ 5,407,952 65</u> |
| Net Funded Debt | <u>\$ 11,670,997 35</u> |
| The Funded Debt, January 1, 1895, was..... | \$ 17,722,950 00 |
| The Funded Debt, December 31, 1896, was..... | <u>17,078,950 00</u> |
| Showing a reduction during last two years of..... | <u>\$ 644,000 00</u> |

All accounts of 1896 have been paid in full excepting vouchers amounting to \$20,212.14, for which special provision has been made.

The following figures are given showing the population of the City for the past eight years and the total assessment on property of all kinds, the income derived therefrom on the 2 per cent tax and also the rate per capita:

| Year | Estimated Population | Total Assessment | 2 per cent Yield | Per Capita |
|------------|-------------------------|---------------------|---------------------|---------------|
| 1889 | 1,000,000 | \$201,104,019 00 | \$4,022,080 38 | \$4 02 |
| 1890 | 1,100,000 | 219,354,368 00 | 4,387,087 36 | 3 98 |
| 1891 | 1,200,000 | 256,599,574 00 | 5,131,991 48 | 4 27 |
| 1892 | 1,300,000 | 243,732,138 00 | 4,874,642 76 | 3 74 |
| 1893 | 1,400,000 | 245,790,359 00 | 4,915,807 18 | 3 51 |
| 1894 | 1,500,000 | 247,425,442 00 | 4,948,508 84 | 3 29 |
| 1895 | 1,600,000 | 243,476,825 00 | 4,869,536 50 | 3 04 |
| 1896 | 1,700,000 | 244,357,286 00 | 4,887,145 72 | 2 87 |

The foregoing figures show that during the eight years mentioned there has been a decrease in the general tax assessed for corporate purposes of \$57.37 (or 28 per cent) per capita. They also show that, estimating the present population of Chicago at 1,700,000, the tax for 1896 has yielded to the City for corporate expenses \$1.15 less per capita than the tax of 1889; and the (per capita) loss of annual income for corporate purposes, as compared with 1889, reaches now in round figures to \$1,950,000 per annum.

PUBLIC WORKS.

The affairs of this Department during the past two years have been carefully administered. In accordance with my general instructions, [the Department has been conducted on strict business principles and all its employes have been required to perform a full day's labor in order to be entitled to a full day's pay.] The results in this respect, as in the matter of materially reducing the expenses of the Department, have been highly satisfactory. It is not possible for me at this time to do more than direct your attention to the principal features of the year's work; but detailed facts and figures are given in the Commissioner's report, to which you are respectfully referred. Among other things, however, that report [shows a reduction in the Department pay rolls for the twenty-four months of this administration of \$1,337,655.13] It will of course be understood that these figures, showing the saving effected in the Department of Public Works, are also found in the statement of "Pay Rolls" by Departments, given in another place in this communication. They are here set forth as indicating what has been accomplished along the lines of retrenchment in this important Department of the City government. In this connection and while commenting upon the work of this Department, it is a matter of congratulation to note the

progress made in the construction of the new northwest land tunnels which when completed will insure an abundant supply of water to the residents of the extreme northwest and southwest portions of our City. As your honorable body is well aware, the work of construction upon this new system of tunnels was begun in the latter part of 1895. On section one, beginning at the foot of Oak street on the lake shore and extending to the intersection of North Green street and Grand boulevard, and having a total length of 8,666 feet, 8,003 feet were completed on April 1st, leaving only 663 feet of unfinished work on this section. The total cost of this section will be about \$200,000. Section two, which is an extension of section one, runs southwesterly from Central Park avenue and Filmore street. Its total length is 19,830 feet, and of this, up to April 1st, 12,340 feet had been completed. The total cost of this section will be about \$470,000. Section three, which is the northwest branch of the system, begins at the Green street shaft and extends northwesterly to Springfield avenue and Bloomingdale road. Its total length is 22,300 feet, and of this 3,957 had been completed by April 1st. The total cost of this section will be about \$480,000.

The new lake tunnel, which is the lake extension of the land tunnels, runs from the Oak street shaft in a northeasterly direction to a crib which is to be located four miles from shore; of this 2,334 feet have been completed, leaving 18,786 uncompleted. The total cost of this will be about \$1,010,000.

In addition to the improvements above mentioned, lots have been purchased for two new pumping stations, one to be located at Springfield avenue and Bloomingdale road, the other at the corner of Central Park avenue and Filmore street. Three new pumping engines for each of these stations have been contracted for, the capacity of each engine to be 20,000,000 gallons every twenty-four hours, making a total capacity for each station of

60,000,000 gallons. Each station, however, is to be built to accommodate a fourth engine of like capacity, which will be added when needed, and which will bring the total ultimate capacity of each up to 80,000,000 gallons every twenty-four hours. The cost of machinery contracted for will approximate \$470,000 for each station, and the cost of the two buildings complete, exclusive of machinery, will be about \$300,000.

In view of the fact that for years past the water supply for those portions of the City affected by these improvements has been wholly inadequate to the needs of the people, and has operated to seriously retard the growth and development of the sections named, it is a matter of the utmost importance that their completion should be pushed forward as rapidly as possible.

BUREAU OF STREETS.

In this Bureau of the Department of Public Works a brief review of the work accomplished during the past year shows highly satisfactory results. Notwithstanding the engineering force of the Bureau was reduced one-fifth at the beginning of 1896 there has been an increase of nearly 75 per cent. in the amount of work done over that of 1895. A glance at the figures giving the work of street improvement for the year 1896 shows that new pavements of all kinds, including cedar block, asphalt, granite, macadam and brick in the various divisions of the City, were laid upon 81.74 miles of streets and 4.33 miles of alleys. Of this 53 per cent. was cedar block, 20.6 asphalt, 4.2 granite, 16.5 macadam, and 5.7 brick. In addition to the actual work of construction above mentioned, preliminary estimates of street and alley improvements were returned during the year to the Special Assessment Bureau, amounting to 156.42 miles, of which the estimated cost was \$5,153,190.74. For the year 1895 the same class of work amounted to 152.54 miles, and the

estimated cost \$5,491,765.12. Although estimates for an increased number of miles of improvements have been made during the year 1896, as compared with 1895, there is yet a reduction in the estimated cost amounting to \$338,554.38. During the year the Bureau has constructed 238.25 miles of sidewalks, including plank, concrete and stone. There were 4,863 miles of sidewalks under the control of the City and the various Park Boards at the close of 1896.

The report of the Bureau contains many interesting facts and figures, illustrating both the growth of the City and the work performed, which cannot be mentioned here. Suffice it to say that, taking into consideration the enforced reduction in its working force, and the inadequate amount of money appropriated for it, [the showing made is in every way creditable to the Bureau and indicates that its affairs have been well and economically administered.]

STREET CLEANING.

The affairs of this Bureau have been well conducted, many new reforms having been introduced and much needed and valuable work performed; but despite this excellent showing the result has fallen short of public expectations. That this should be true is no fault of the administration or of the Superintendent who has had immediate charge of the Bureau, but must be laid entirely to the fact that the appropriations for the past two years have been entirely inadequate to its needs. In view of the fact that the appropriation for 1896 was smaller than that for the preceding year, and that at the same time there was a large increase in the number of miles of streets to be cleaned, the amount of work performed certainly indicates careful and intelligent administration of its affairs and the best possible use of the funds available. It is, too, a fact deserving of comment that the appropriation for street cleaning purposes

per capita has shown a steady decrease since 1888, in which year it averaged \$2.42, to and including 1896, for which latter year it was \$1.01 per capita. In 1888 the population of the City was 802,651; at the present time its estimated population is 1,800,000. With these figures before us it is little wonder that the Bureau has been subjected to severe criticism, and that there is a general demand for cleaner streets from the public which does not understand, or if it does, refuses to recognize, the absolute inability of any administration to clean the streets of the City thoroughly without having more funds for the purpose. In the face of these unfavorable conditions, under this administration, more miles of streets have been cleaned than were cleaned during the preceding two years, while at the same time there was a decrease in the expenditures of the Bureau amounting to \$532,831.68. This is shown by the following statement of the expenses of the Bureau for the twenty-four months of the present administration, from April 1st, 1895, to March 31st, 1897, as compared with the previous twenty-four months from April 1st, 1893, to March 31st, 1895. The figures are as follows:

| | 24 Months 1893-4-5 | 24 Months 1895-6-7 | Decrease |
|------------------------------------|------------------------------|-----------------------|---------------|
| Removal of Garbage. | \$ 1,172,482 71 | \$ 796,208 18 | \$ 377,274 53 |
| | \$ 18.00 13,731 miles | <u>21,292 miles</u> | Increase |
| [Street cleaning by contract..... | \$ 234,144 34 | \$ <u>289,955 67</u> | \$ 55,791 33 |
| | | | Decrease |
| Street cleaning by Bureau..... | \$ 362,679 70 | \$ 151,331 22 | \$ 211,348 48 |
| | <hr/> \$ 1,770,306 75 | <hr/> \$ 1,532,475 07 | <hr/> |
| Decrease..... | | | \$ 532,831 68 |

According to the reports of the Superintendent of the Bureau, it is shown that during the year 1896, 2,448.58 miles of streets were cleaned at a cost of \$8.40 per mile; 10,837.23 miles at \$12.50 per mile, and 2,360.83 at \$2.50 per mile (this latter being work done in the day time in the first district);

$$\begin{array}{r}
 \$ 13.60 \\
 10.26 \\
 \hline
 \$ 3.34
 \end{array}$$

209.35 of alleys at \$16.80 per mile (first district), and 312.73 miles of bridges, viaducts and approaches at \$6.80 per mile, making a total cost of \$165,976.03 and the total number of miles of streets cleaned 16,167.

$$\begin{array}{r}
 * 10.26 \\
 3.34
 \end{array}$$

It will be seen from the above figures that a material reduction has been made in the cost per mile of street cleaning as compared with the prices paid under former administrations, which ranged from \$18.50 to \$28.00 per mile. This showing is all the more creditable when it is remembered that not only have more miles of streets been cleaned, but that the outlying portions of the City have been cleaned oftener than has been the custom heretofore. It is a fact easily demonstrated by figures that with the amount of money at its command, in order to clean the streets and keep them in the condition demanded by the public, it would be necessary for the City to be able to get the work done at about one-tenth of the rates it now pays, which is, of course, out of the question.

WATER OFFICE.

In the Water Department, as in other Departments, a most excellent showing has been made, both in the material reduction of expenses and in the largely increased receipts; and this despite the fact that the past year has been one of almost unparalleled business depression. The total increase in the collections for the years 1895 and 1896 over those of 1893-1894 is \$593,609.56. The entire expenses of operating the Department for the year 1896 were \$285,831.95 as against \$309,273.30 for 1895, a net saving of \$23,441.35. There has also been a gradual reduction of the percentage of expenditures during the past six years, ranging from 13 per cent. in 1891, in which year the total receipts were \$2,331,286.20 to 8.8 per cent., in 1896, when the receipts amounted to \$3,226,559.73. It will thus be seen that the year 1896 furnishes the largest receipts with the smallest expenses and the lowest percentage of cost of any

during the past six years. In this connection, too, public attention should be directed to the fact that the rates charged for water service in Chicago are lower than those of any of the other leading cities of the United States. Property owners sometimes grumble at what they claim are excessive rates charged for water service, and these complaints have naturally been more prevalent than usual during the past two years. An investigation of the subject, however, shows that in ten of the principal cities of the country the frontage rates in eight of them are much higher than those charged in Chicago. In one city alone, New York, the rate is the same as that charged in Chicago. In New York City, however, sprinkling and the use of hose is prohibited. Of these cities Cincinnati is the only one, besides Chicago, where a discount is allowed, while in most of them a penalty is added where the bills are not paid within a given period. In Chicago a discount of 15 per cent. is given when bills are paid promptly. Chicago's meter rates are also lower than those of any other large city, being ten cents per thousand gallons for the first 165,000 gallons, and eight cents beyond that quantity, as against rates ranging from 13 to 13½ cents in other cities.

SPECIAL ASSESSMENTS.

If any one branch of the Municipal Government has occupied a prominent place in the public mind and been the target of much unfavorable criticism during several years past, it has been the Bureau of Special Assessments. Complaints have frequently been made as to the workings of the special assessment system and, it must be admitted, with some cause. During my administration an earnest effort has been made to correct the abuses complained of in so far as such correction lay in my power. But radical differences of opinion prevail among the people respecting the entire system and respecting public improvements generally. The principle of special

assessments is sound, for it contemplates that property pecuniarily benefited by any proposed improvement shall bear a part of the cost commensurate with the benefit received. Unfortunately it is subject to more or less abuse when put into actual practice. In this, as in all other matters controlled by human agencies, the power to do the right thing as a rule carries with it the power to do the wrong thing. One of my first orders to the Department of Public Works was that estimates made by the City Engineers should be reduced as nearly to the actual cost of construction as could reasonably be ascertained, measuring such estimates by actual bids received at the time. Pursuant to that order estimates were so reduced for all kinds of work payable from special assessments; the average reduction for 1895 being 21.7 per cent., and for 1896 25 per cent. The volume of assessments has thereby been reduced about one million of dollars for each of the years mentioned, thus relieving property owners from paying this additional sum. The expenses of the Bureau have been materially decreased, as shown by the figures submitted for the years 1893 to 1896 inclusive. The items covered include salaries of clerks, engineers and rodmen, services of commissioners, and of clerks of the County, Superior and Circuit Courts, services of real estate experts, advertising, legal expenses, printing, stationery and car fare, cost of collecting assessments, and miscellaneous items. The detailed figures can be found in the report of the Commissioner of Public Works.

Another instruction given was that property owners, as far as possible, should be required to pay only the actual cost of the various improvements, and accordingly nearly 90 per cent. of the rebates for 1895 and 1896 were deducted before payment was required. By this means a large majority of property owners were relieved not only from paying the full amount of their assessments, but also from the trouble of

collecting their rebates. It should be noted, too, that during the past two years contracts for this class of work have been awarded at lower figures than at any time in the previous history of the City, and in no case have the estimates been made lower than the actual cost of the work. The report of the Commissioner of Public Works shows that the volume of business transacted by the Special Assessment Bureau exceeds that of last year; while at the same time there has been a corresponding decrease, in proportion to the volume of business, in the expenses of the Department. It is my judgment that there are few grounds for serious complaint as to the manner in which the special assessment system is administered at the present time, though the system now in vogue is faulty and should be subjected to radical changes.

One of the principal evils of the present system is the hasty and unmethodical manner in which improvements of this kind are all started—largely on account of that difference of opinion which seems to be always prevalent among the people as to the utility or desirability of any proposed improvement. On repeated occasions, where the improvement of a leading thoroughfare was involved, the differences of opinion among the interested property owners, both as to the desirability of the improvement and as to the manner in which it should be made, have been such as to delay or stop the work altogether; and in all such cases the City has been put to no little expense in the preliminary work attendant upon them.

In view of the objections to this branch of the municipal government we had prepared and submitted to the State Legislature a bill which was first approved by your honorable body and which it is believed will remedy the evils complained of. This measure, which has been freely discussed by the press, and with whose general provisions you are familiar, is still pending. Several other measures covering the same ground

have also been submitted to the Legislature, and it is to be hoped that that body, enlightened by the general discussion which has prevailed upon this subject for the past two years, will be enabled to pass such a law as will correct the defects of the statute under which we are now working.

PUBLIC LIGHTING.

In the administration of the financial affairs of the City no other subject has presented so many difficulties nor been the source of so much perplexity as that of street lighting. At the very outset of my administration there confronted me the fact that the appropriations for years past had fallen so far short of the amount needed to enable the City to pay its gas bills promptly that it was already greatly in debt to the different companies, the indebtedness being in the form of interest-bearing judgments. For the first year no other course was possible than to permit some further indebtedness to accrue, in the way of judgments, but during the last year a better result was obtained. As the gas companies were not inclined to accept further judgments in lieu of cash, and the City desired to avoid giving such judgments, it became a matter of necessity to reduce the expense of lighting the streets to the lowest practicable point and to find some available resources in addition to the inadequate amount appropriated from the tax levy. Receipts from various miscellaneous sources, such as payments exacted by me from street railway companies for new privileges, were applied to street lighting purposes, and ultimately sufficient moneys were obtained to light the City upon an economical basis. For this economy it became necessary to discontinue a large number of lights located mainly in the outlying portions of the City, and also to reduce by one-half the lights burning on many of the leading thoroughfares. The extent to which this policy of retrenchment was carried out may be shown from

the fact that on April 1, 1895, the City had 50,197 lamps in service, including gas and gasoline, while during the two years following, up to December 31, 1896, there were discontinued 3,985 gas lamps and 3,390 gasoline lamps, making a total of 7,375. During the same period, however, many of the discontinued lamps were restored to service in cases where it was plainly evident that the welfare of the public demanded it. It is not claimed that for all the lights discontinued the City had previously been incurring an unnecessary or unwarranted expense in their maintenance. It is a matter too well known to require comment here that dark or poorly lighted streets add largely to the criminal deeds of a great city. It was found, however, that without material danger the number of lights could be reduced, with a corresponding reduction in the amounts which the City would otherwise have had to pay for lighting. There were of course many complaints from property owners who claimed, and not without some show of justice, that they were not receiving the benefit for which they as taxpayers had already paid. Notwithstanding these complaints and any seeming injustice that may have been done to those who made them, the saving effected for the City has in my judgment fully warranted the action taken.

Another feature of the work of the Street Lighting Bureau deserving of special mention has been the preparation and compilation of a set of books containing charts, arranged by wards, showing the exact location of every gas, gasoline and electric lamp within the corporate limits of the City. The preparation of these books involved a vast amount of labor, but being so arranged that they can be used indefinitely for the purposes for which they were made, and facilitating, as they do, the transaction of the business of the office, the time employed and the expense incurred are but trifling compared with their value to the City.

HEALTH DEPARTMENT.

The affairs of the Health Department fully justify my action in selecting a business man as its head. It is fair to assert also that the people of Chicago, in general, will agree with me that during the past two years there has been an improved degree of efficiency in every branch of the health service, together with a more systematic and effective organization due to the separation of the executive and business work from the strictly professional duties of the Department. Its practical work in providing proper safeguards for the food supplies of the people, including milk, ice, water, etc., and its important service in promoting the general public health by requiring thorough vaccination, by the introduction of antitoxin treatment of diphtheria, and by measures tending to the prevention and suppression of contagious diseases, have been such as to occasion general commendation. Its record along these lines has already passed into history, and is too well known and too universally recognized to require detailed mention at this time. It is proper, however, that special reference should be made to its work in certain particulars.

Foremost among the subjects which have engaged its attention, and which is of paramount importance as affecting the public health, is that of the purity of the water supply. Credit must be given to the Assistant Commissioner for the suggestions which led to my appointment of a Commission of well known experts to ascertain and to recommend the best method of securing an ample supply of pure water. That Commission, as you are aware, has performed the work assigned to it, and its report presented to your body on March 1st of this year sets forth without question the only practicable solution of this all-important problem. If any one thing in connection with the procuring of a permanent and satisfactory supply of water for this great and growing city has been

made clear, it is that this desideratum can be obtained only by the construction of the system of intercepting sewers recommended by the Commission. The undertaking is one of great proportions, involving the outlay of a large sum of money; but the work to be done and the expense to be incurred dwindle into comparative insignificance when we consider the inestimable benefits that will follow its completion.

Another important problem concerning the public health to which attention has been given, is the question of the final disposal of garbage. The present method of dumping animal and vegetable matter into clay holes and other excavations within the City limits, often in populous neighborhoods and in close proximity to public schools, is intolerable—offensive to the senses and destructive of health and life. The Commissioner has visited many leading cities, including New York, Brooklyn, Philadelphia, Boston, Pittsburg, St. Louis and Milwaukee, and has studied their methods and examined their garbage disposal processes. The difficulty in the solution of the problem has been, not in the absence of known satisfactory methods, but in the charter provision which forbids the City to make contracts involving the payment of money for more than a single year. A plant adequate to the final and inoffensive disposal of the garbage output of Chicago will cost a large sum, and no one will invest the necessary amount without assurance that such plant will not be idle at the end of the first year. The State Legislature was applied to, and the passage of an Act was secured authorizing the City to make contracts for the collection and final disposal of garbage for periods not exceeding five years, and there is now good prospect that Chicago is on the eve of getting rid of a monstrous nuisance and menace to its health. This is the most important practical step that has yet been taken in dealing with a question to which successive City Councils and administrations have given unfruitful attention for a score or more of years.

A signal success in the administration of the Health Department is found in the fact that the medical profession admit that the decrease of nearly 2,600 deaths last year from the average annual number of the preceding five years is due directly to the work of the Department. This reduction of nearly ten per cent. in the average annual mortality is exclusively among children under five years of age; and physicians and sanitarians both agree that it is in the conditions affecting infant and child life that sanitary effort is most effective. It is this saving of the lives of nearly 2,600 infants and children that reduces our death rate below that of any city in the world of similar population. For 1896 the death rate of New York was 21, for Philadelphia 20.3 and for Brooklyn 20 per thousand of population.

In Chicago there were 23,257 deaths from all causes and at all ages last year, the least number recorded since the national census of 1890. On the basis of the minimum population of the school census of July, 1896, namely, 1,619,226, this makes Chicago's death rate only 14.4 per thousand of population, the lowest of any large city in the world.

As you are aware, the City has recently erected a new and commodious isolation hospital, which institution, however, owing to the immunity which the City has enjoyed from that dread disease smallpox, has not been used. It has, therefore, been decided to convert this smallpox hospital into a general isolation hospital for contagious diseases of all kinds. As there has long been an urgent need in this City for an institution of such character, this seems the best possible use to which it can be put.

POLICE DEPARTMENT.

In fulfilling the pledge made to the people prior to my election, to take the police force out of politics, a well known and reputable business man was placed at the head of the Police Department. My policy in selecting a General Superintendent not previously connected with the force excited at the time some unfavorable criticism. It can now be safely asserted that at no time in the history of the City has the Police Department been so absolutely free from political entanglements as during the past two years.

If any one thing has conspicuously emphasized the marked change in the *esprit de corps* of the force it has been the conduct of its members on the occasion of National, State and Municipal elections. Not a single instance can now be recalled where a complaint has been made as to the partisan conduct of the police at any election held in this City during my term of office. This fact speaks volumes and needs no further comment. Such changes and removals as have been made have been ordered only after a careful investigation by the trial board, and under circumstances which seemed to justify them for the good of the service. The result has been a steady improvement in the discipline and efficiency of the men employed, and a proper weeding out of that class whose membership in the Department was a constant menace to its usefulness in protecting the lives and property of our citizens. The conduct of the Department has been such as to challenge the commendation of all classes of citizens in that good order has prevailed throughout the City at all times, and that all practicable protection has been afforded to every citizen. By this it is not meant to say that some violence and crime in various forms have not been manifested as they will always be in a city of this size; but it is asserted that these inevitable evils of municipal life have been reduced to a

minimum, despite the fact that the past two years have seen unusual financial depression and business stagnation, with enforced idleness and want, and these are always attended by a corresponding increase in crime. Some things can not be done, and one of these is to set a police watch over the life and the property of each individual citizen. Desperate men will take desperate chances, and the police are no more to be held responsible for all violence and robbery than they would be if one member of the Council should suddenly rise in his place and shoot another, or than they were when a former honored Mayor was stricken down in his own home. Responsibility is far more to be found in a feeble judicial system for criminal offenses, and in the defective judicial administration of criminal justice.

USE OF THE POLICE IN RELIEVING DISTRESS.

While speaking of the Police Department, it is proper to call attention to the efficient services rendered by it in the early part of this year, in relieving want and suffering among the unemployed laboring classes throughout our City. There was then demonstrated in the most practical manner, and to the satisfaction of the public, the utility of the police force in a new and hitherto untried field. After many anxious hours spent in deliberating over the condition of the suffering and worthy poor of the City, and the best means of giving them prompt and immediate aid, the idea occurred to me to try the agency of the Police Department. The plan seemed feasible, and the Superintendent of Police was directed to issue at once the necessary orders to the various police stations, and at the same time through the public press an appeal was made to the public for popular subscriptions to a fund to be known as the "Mayor's Relief Fund," and to be distributed through the agency of the Police Department. In their usual prompt and

generous manner the people of the City responded, and it is a source of regret that mention cannot here be made by name of the noble-hearted and public-spirited who, appreciating the dire need of the hour, at once sent in their contributions. Due acknowledgment is, however, made to them in the report of the Superintendent of Police on this subject, where will also be found a detailed statement of the sums received and disbursed. It is gratifying to know that between January 25th and February 20th there was contributed to this relief fund the sum of \$64,906.80 in cash, besides which there were large donations, to the amount of thousands of dollars, in fuel, clothing and provisions, all of which were promptly distributed by the Police Department. Of the money thus received \$62,347.31 were expended in the purchase of 546,232 pounds of meat, 470,736 pounds of bread and over 6,000 tons of coal. The food and fuel were purchased from wholesale dealers in large quantities and at the lowest cash prices, and were distributed among 66,557 families, an average of 2,731 being cared for daily. In all 304,802 persons were aided. The members of the police force entered upon this charitable work with great zeal and alacrity, and so interested did they become in it, and so impressed were they with its practical character, and so strongly did it appeal to their sympathies, that out of their own salaries they contributed the sum of \$1,680 to the relief fund. The above expenditure was made and relief furnished without one cent of cost for time or services or for rent. Last, but by no means least, the police appeared in a new light to a large class of people who had hitherto looked upon them with suspicion and hostility, and a marked lessening of petty crimes was noticeable. In many localities where the patrol wagon had formerly been greeted with jeers and curses it now became a welcome sight, laden as it was with fuel and provisions for the cold and hungry, while the promptness with which this sorely-needed aid was supplied won the gratitude of the

recipients themselves and the hearty commendation of the public. There was furnished a striking object lesson, which it is hoped will not be forgotten, as to the efficiency of the Department in work of this kind. A similar use of the Department can wisely be made again should occasion arise in the future.

LAW DEPARTMENT AND LEGAL MATTERS.

The work of a considerable portion of the Law Department, and especially of its head, the Corporation Counsel, is largely advisory or supervisory. The Corporation Counsel's office comes in contact with all the other departments, and materially affects their work. It is consulted upon all kinds of questions in the preparation of ordinances, contracts and other papers. It ought to be consulted more than it is, particularly in connection with ordinances and contracts, for many awkward mistakes would thereby be avoided which are productive of embarrassment and expense. In the matter of litigation the various offices constituting the Department have accomplished very satisfactory results. No important legal defeat has been suffered by the City, and many cases of importance have been won. The County was defeated in its effort to oust the City from the City Hall, and the principles have been established that the issuance of a license for a saloon in a strictly residence district will not be compelled by *mandamus*, and that a neighborhood may be lawfully given some voice in determining whether it will have such things as a livery stable in its locality. The railway crossing cases, appealed by certain railroads to the Supreme Court of the United States, were dismissed from that court on the ground that they did not involve any Federal question, and it is now settled that the City may extend streets across railroad rights of way without paying damages.

At the present time there are pending in the Supreme Court several important cases in which the City is interested, including suits involving the relative rights of the City and of Park Commissioners at intersections of City streets and park boulevards; the right of Michigan avenue property owners to control the City's use and disposition of the lake front north of Monroe street; and the right of such property owners to control the action of the City or Park authorities in the improvement of the new Lake Front Park. In the lower courts there are pending a large number of cases against railroad companies to recover from them the aggregate amount of damages for which property owners have already obtained judgments, or are yet prosecuting suits against the City, and there are likewise pending many cases against the City brought by railroad companies to recover a still larger aggregate amount of alleged damages for property destroyed in the great strike of 1894. The claims of the City against the railroad companies are complicated, and are yet incomplete, because there are still many suits by property owners against the City undetermined. The legal position of the City is also somewhat embarrassed by a decision of the Supreme Court of this State in *Illinois Central Railroad Company v. the City of Bloomington*, 76 Ill. 447. As the final judicial determination of these viaduct damage cases will necessarily require many years of litigation, it was thought best early in my administration to attempt a settlement with the railroad companies, and this was undertaken as soon as the facts and the law had been sufficiently investigated. The negotiations, however, ultimately came to naught because of the complications involved and the apparent joint liability of different roads in many instances, and because the railroad companies, having so-called "riot claims," were unwilling to settle the viaduct cases unless they could at the same time settle the "riot cases." It then became

apparent that these two classes of cases must be fought out substantially together, and with the delays incident to the work of the courts, and the constant occupation of the regular staff of the Law Department, it has been impracticable to press the viaduct damage cases, while naturally we have not cared to hasten the "riot" cases. The City should ultimately employ special counsel in these cases. It is not possible for the regular Law Department to do justice to the interests of the City in this litigation, and at the same time carry on its other work. Moreover, the regular Law Department undergoes nearly a complete change every two years, and some changes occur in it even more frequently, so that one set of lawyers hardly become familiar with the litigation before they leave the City's service, and others come in who know nothing about it. The important "riot" cases have not yet been reached for trial, but they will presently be reached, and then counsel ought to be put into them who can remain with them until they are finally concluded.

The work of the present Law Department has been eminently satisfactory and particularly may this be said of the exacting and extended work of the Corporation Counsel's office, which has been managed purely as a law office, and has never been surpassed in efficiency.

FIRE DEPARTMENT.

The work of the Fire Department during the past two years calls for no special comment. We all know its condition under its present efficient Chief, and it is sufficient to say that it has maintained the high reputation it has for years enjoyed.

EXTENSION OF THE ELECTRIC LIGHT SYSTEM.

During the past two years there has been considerable agitation on the subject of municipal lighting of the public streets on the part of those who are strenuously advocating municipal control of street railways, gas plants and other public works. In this connection it may be stated that Chicago has already made a substantial beginning along these lines, and [in my opinion the City's electric lighting system as it now exists is already furnishing a satisfactory demonstration of the entire feasibility of the City's operating its own lighting plants.] Material additions to the system have been made during the past year, consisting of one 125-light dynamo, nearly 20,000 feet of steel wire, over 67,000 feet of single conductor light wire and cable and 152 2,000 candle-power street lamps. The lighting by electricity in the First Ward has also been completed, and all gas and gasoline lamps formerly in service in that ward have been discontinued. A number of arc lamps have also been placed in alleys where needed. The City is operating four plants which are now carrying a total of 1,254 arc lights. Believing that municipal lighting is entirely practicable, and believing, too, in the substitution of electricity for gas for street lighting purposes, I do not hesitate to recommend that a considerable increase should be made in the sums appropriated for the purpose of extending the Department as fast as the City's financial condition will permit. In my judgment it is imperative that this should be done, for the reason that [a large number of additional lights could be operated by the plants that we now have without increasing the expense, but on the contrary materially reducing it.]

SPECIAL PRIVILEGES.

At the present time the community is taking great interest in the subject of compensation for special privileges, particularly compensation from street railway companies for licenses,

commonly but erroneously called "franchises," to use the public streets. This topic was somewhat considered in my former message, and the view was expressed that reasonable and proper compensation should be exacted in all cases of special privileges granted; that it does not matter whether such compensation be made directly to the City Treasury, or indirectly in some other manner so that the public gets it; but that public sentiment seems to be in favor of the direct method. This view is still held by me, and in accordance therewith it would give me gratification to discuss at some length the granting of special privileges, the exaction of compensation therefor, and the related subject of frontage consents from private property owners. It is not practicable, however, for me to do more than outline certain considerations worthy of attention.

In this connection I submit the following statement showing the City's receipts from street railway companies from April 1, 1895, to December 31, 1896, and separately for the year 1896.

RECEIPTS FROM STREET RAILWAYS.

FROM APRIL 1, 1895, TO DECEMBER 1, 1896.

| | License | Department of Public Works. | Street Lamps. | Special Department Fund. | Total. |
|--------------------------------------|--------------|-----------------------------|---------------|--------------------------|---------------|
| Chicago City Railway | \$ 37,886 00 | \$ 95,755 76 | \$ 55,000 00 | \$ 10,000 00 | \$ 198,641 76 |
| West Chicago Railway | 33,948 97 | 4,500 00 | 50,000 00 | | 88,448 97 |
| North Chicago Railway | 25,089 86 | 32,000 00 | 25,000 00 | 25,000 00 | 107,089 86 |
| North Chicago Electric Railway | 1,237 67 | | | | 1,237 67 |
| North Chicago North Shore Railway .. | 1,230 25 | | | | 1,230 25 |
| North Chicago C. E. T. Railway | 1,011 18 | | | | 1,011 18 |
| Calumet Electric Railway | 2,389 80 | 2,000 60 | | | 4,389 80 |
| Chicago South Side Railway | 9,500 00 | | | | 9,500 00 |
| *Metropolitan Railway | 10,958 33 | 6,460 98 | | | 17,419 31 |
| Chicago, Jefferson & Urban | 507 49 | | | | 507 49 |
| South Chicago R. R. | 1,455 00 | | | | 1,455 00 |
| Cicero & Proviso | 269 75 | | | | 269 75 |
| Lake Street Elevated | 3,200 00 | 6,800 00 | | | 10,000 00 |
| Northwestern Elevated | | | 20,000 00 | | 20,000 00 |
| Chicago General Railway | 473 40 | | | | 473 40 |
| Totals | \$129,157 70 | \$147,516 74 | \$175,417 48 | \$ 35,000 00 | \$ 461,674 44 |

*General Fund, \$25,417.48.

RECEIPTS FROM STREET RAILWAYS—1896.

| | Street Car Licenses. | Department of Public Works. | Street Lamp Fund. | Street Department Fund Electric Light Maintenance and Construction. | Total. |
|---------------------------------------|-------------------------|-----------------------------------|-------------------------|--|---------------|
| Chicago City Railway Company | \$ 22,024 75 | \$ 46,678 84 | \$ 55,000 00 | \$ 10,000 00 | \$ 133,703 59 |
| West Chicago Street Railway..... | 16,726 87 | 3,000 00 | 50,000 00 | | 69,726 87 |
| North Chicago Street Railway..... | 15,739 86 | 14,000 00 | 25,000 00 | 15,000 00 | 69,739 86 |
| North Chicago Electric Railroad | 1,237 67 | | | | 1,237 67 |
| North Chicago North Shore R. R. | 203 55 | | | | 203 55 |
| North Chicago C. E. T. Company..... | 723 77 | | | | 723 77 |
| Calumet Electric Railway..... | 1,302 30 | 2,000 00 | | | 3,302 30 |
| Chicago South Side R. T. Co..... | 5,000 00 | | | | 5,000 00 |
| Metropolitan W. S. Elevated Ry..... | 5,750 00 | | | | 5,750 00 |
| *Chicago, Jefferson & Urban..... | 336 12 | | | | 1,147 57 |
| South Chicago Railroad..... | 425 00 | | | | 425 00 |
| Cicero & Proviso..... | 108 61 | | | | 108 61 |
| Lake Street Elevated Railway..... | | 6,000 00 | | | 6,000 00 |
| Northwestern Elevated..... | | | 20,000 00 | | 20,000 00 |
| Totals | \$ 69,578 50 | \$ 71,678 84 | \$ 150,000 00 | \$ 25,000 00 | \$ 317,068 79 |

*General Fund, \$811.45.

So far as street railways are concerned, there is no difficulty about the principles to be applied; the problem is to apply them in any given case. The privileges should not be granted to the detriment of the public welfare, and if practicable the people in the immediate locality should be consulted.

It is manifestly impossible to lay down any given rule for uniform compensation, as each case must be governed by its own circumstances. What would be a moderate compensation at one time, or from a certain line, would be oppressive or even prohibitive at another time, or from another line; and, on the contrary, a seemingly high or even excessive compensation from any line at a certain time would be altogether inadequate from another line, or from the same line after the greater development of its business. Clearly the street railway lines, as a whole, do not now return to the public a sufficient compensation for their privileges, and, on the other hand, it is my judgment that there is some disposition in the community to exact too high a compensation from them. It must be remembered

that the street railway licenses are of comparatively short duration, and that the companies are not guaranteed against competition. Long and exclusive licenses will, of course, yield a much larger return, but the public appears to prefer short and non-exclusive licenses rather than large compensation. Fairness on both sides is what is wanted. Compensation and protection must go hand in hand. My view is that the law ought to permit exclusive long-term grants, subject to just compensation and proper regulation, for a street railway is a natural monopoly in any territory where it has been constructed, and in the end the public is more likely to get satisfactory service from such a monopoly, closely regulated, than from rival and warring companies in their usually impecunious condition.

Whenever application is made for a street railway license it is accompanied by a petition of property owners, under the frontage consent law. The working of this law has come to be altogether different from what was intended, and it is a question in my mind whether it now serves any useful purpose although it enables property owners to obtain from a railway company compensation which ought to go to the City. Every grant to a street railway company for two tracks requires the company to pave the center sixteen feet of a street and to keep the pavement sprinkled and in repair, thereby relieving the property owners of considerable expense; but whenever such a grant is sought we are usually treated to a spectacle of the property owners indirectly selling their consents, and oftentimes selling out their neighbors', with the inevitable dispute as to whether certain individuals have signed, or have not signed, or have revoked. Some remedy for this condition of things is needed, but it is difficult to find just the right one.

The principles applicable to the grant of special privileges to street railway companies apply equally to all other corporations, and likewise to individuals, and the special privileges

allowed to individuals seem to be generally lost sight of. At the present time, for instance, every property owner is allowed to excavate for his own use the space in the street under the sidewalk, which belongs to the City. Why should not all these property owners be compelled to pay the City a fair compensation for the use of this space, or why should not the City make use of the space for its own purposes? At the present time a property owner may have an excavated space of much value under a broad sidewalk hundreds of feet long, and yet because the City technically owns the sidewalk, which is in law a part of the street, the property owner cannot even be compelled to keep the snow from the sidewalk in the winter time.

In granting special privileges the primary consideration is, of course, the benefit to the general public, directly or indirectly, immediately or remotely. Without such benefit there is no excuse for granting them at all. It is supposed, for example, that facilitating a man's business by allowing him to excavate an alley promotes the general business and prosperity of the community, and this is doubtless true. The difficulty is to determine separately in every case the relative benefits to the community and to the individual or corporation, and to make the compensation fair and reasonable to both sides under all the circumstances of the case.

PAY ROLLS.

Upon assuming the duties of this office an investigation was ordered as to the character and fitness of those holding positions under the City, their number, and the services they were rendering for the pay they received. The result of these investigations was that the pay rolls of the City were thoroughly purged of numerous employes whose only excuse for being upon them was that they had rendered valuable services to the political party to which they happened to belong.

As emphasizing the work accomplished in materially reducing the pay rolls of the City it may be stated that the total saving thus effected during the past twenty-four months amounts to \$1,822,391.81. For your information a statement is submitted showing the pay rolls of the present administration for the past twenty-four months, or from April 1, 1895, to March 1, 1897, as compared with the pay rolls of the previous twenty-four months, from April 1, 1893, to March 31, 1895.

| | 24 Months 1893-4-5 | 24 Months 1895-6-7 | Decrease |
|------------------------------------|-----------------------|-----------------------|-----------------|
| Police Department..... | \$ 6,856,344 98 | \$ 6,393,851 17 | \$ 462,493 81 |
| Water pipe extension..... | 1,227,650 43 | 798,609 61 | 429,040 82 |
| Bureau of Street Repairs, wages. | 979,396 63 | 667,770 35 | 311,626 28 |
| Sewerage Department..... | 749,147 57 | 514,100 37 | 235,047 20 |
| Street Cleaning Department.... | 362,679 70 | 151,331 22 | 211,348 48 |
| Health Department..... | 307,954 66 | 248,771 36 | 59,183 30 |
| Building Department..... | 97,644 43 | 95,249 58 | 2,394 85 |
| Comptroller's office..... | 65,739 33 | 64,437 25 | 1,302 08 |
| City Collector's office..... | 66,147 39 | 53,506 76 | 12,640 63 |
| Pumping stations | 549,443 10 | 488,003 17 | 61,439 93 |
| Bridge repairs..... | 176,359 81 | 112,830 07 | 63,529 74 |
| City pipe yard | 152,248 25 | 127,591 23 | 24,657 02 |
| Special Assessment office..... | 113,616 59 | 97,685 48 | 15,931 11 |
| Street lamp repairs..... | 69,997 66 | 60,266 32 | 9,731 34 |
| Map Department | 35,538 80 | 30,644 62 | 4,894 18 |
| City Engineer's office..... | 53,065 73 | 47,432 76 | 5,632 97 |
| Commissioner's office salaries... | 55,899 21 | 53,674 43 | 2,224 78 |
| Street Bureau, office salaries.... | 32,254 02 | 31,349 27 | 904 75 |
| Water Department, office salaries. | 456,956 78 | 456,119 81 | 836 97 |
| Totals..... | \$ 12,342,345 74 | \$ 10,428,787 58 | \$ 1,914,860 24 |
| | | | Increase |
| Fire Department..... | \$ 2,537,971 13 | \$ 2,613,899 69 | \$ 75,928 56 |
| Law Department | 65,195 34 | 70,320 69 | 5,125 35 |
| Gas Inspector's office..... | 76,985 51 | 78,805 12 | 1,819 61 |
| Mayor's office..... | 27,854 86 | 28,049 23 | 194 37 |
| Water Works shop..... | 91,734 79 | 101,135 33 | 9,400 54 |
| Totals..... | \$ 2,799,741 63 | \$ 2,892,210 06 | \$ 92,468 43 |
| Total decrease..... | | \$ 1,914,860 24 | |
| Total increase..... | | 92,468 43 | |
| Net decrease..... | | \$ 1,822,391 81 | |

HOUSE OF CORRECTION.

The Council is to be congratulated on having passed the appropriation of \$50,000 for the completion of the John Worthy Training School, which is now being conducted in connection with the House of Correction. As you are well aware, for many years past the House of Correction has been anything else but a reformatory school, at least so far as the juvenile offenders of the City are concerned; on the contrary it has been a school for crime. Statistics furnished me by the Superintendent of the institution show that during the past twenty-four years 24,600 boys, ranging in age from eight to sixteen years, have been committed to the Bridewell for all classes of offenses, from that of mere waywardness to that of felony. He also informs me that the records show that out of this army of boys only 738 had ever attended the public schools of this City. These boys, all of whom are in the formative period of life, have always been confined in the same cells and compelled to associate with old and hardened criminals, and owing to the impressions thus formed, in nine cases out of ten they have gone out into the world to lead lives of crime and wickedness. This is abundantly borne out by a statement made by the Chief Deputy of the House of Correction, who has been connected with the institution for the past twenty-one years, that among the convicts now confined in the Joliet penitentiary he has for years past been able to tell at a glance those who came from Chicago from the simple reason that he had become acquainted with them when boys as inmates of the Bridewell. It occurs to me that no more striking object lesson as to the effect of evil associations upon the minds of our youth could be furnished; and it certainly has not been to the credit of Chicago that for all these years it has been maintaining, under the guise of a reformatory institution, a mere prison from which is annually turned loose upon society a large number of recruits to the criminal classes of our City.

From the first it has been evident that in order to bring about any decided improvement in this deplorable condition of affairs, some means must be found by which juvenile offenders could be completely isolated from old and hardened criminals. At the same time, too, it was equally apparent that in removing youthful offenders from contact with the class already referred to, it would also be necessary to place them in surroundings of a directly opposite character. Naturally, then, the training school, with its happy combination of both mental and physical culture, was suggested as being the only practicable solution of the difficulty, and shortly afterwards the institution for which you have so recently made an appropriation was brought into existence. This school, although as yet in an incomplete state, has been in operation since the first of the year, and with the most satisfactory results; but the full measure of benefits cannot be expected from it so long as its pupils are not wholly isolated from the other inmates of the Bridewell. Under the present conditions, as they can only spend from five to six hours a day in the workshop, being confined for the remainder of their time with the older criminals, much of the good received must be counteracted by this association. It is therefore especially gratifying to know that the sum appropriated by your body will insure the completion of the building with accommodations providing for the perfect isolation of the boys from bad influences, and sufficient to place them amid clean, healthful and salutary surroundings. Inasmuch as your honorable body appropriates annually large sums of money for the detection and suppression of crime, it appears to me that you have shown wisdom in appropriating this comparatively small sum for its prevention. In so doing you are acting in the interests of common humanity, in the interests of our future population and in the interests of present good government; and it is hoped that the need of enlarging,

developing and maintaining this work, which has already become so apparent, will meet with the recognition and support of your honorable body in the future.

STREET CAR TRANSFERS.

Your honorable body is to be congratulated upon the legislation which it has enacted during the past two years, to secure for the people a more liberal system of street car transfers in the North and West Divisions of the City. While the exaction of unjust or unreasonable requirements from our street car corporations has never been approved by me, any legislation compelling them to give transfers for continuous rides on all connecting lines has always had my hearty endorsement. In view of their extended occupation of the streets of our City, it has seemed to me only a matter of common justice that these companies should deal liberally with the public to whom they are indebted for the privileges they enjoy.

PUBLIC BATHS.

Free baths have long been a recognized necessity in this City in order that the very poor may be able to realize the time honored precept "cleanliness is next to Godliness," and the general health of the community correspondingly promoted. The want has been emphasized by the fact we have a constantly filled bath-tub, 300 miles long by 150 miles wide, at our very doors, while this portion of our people have been compelled to go unclean and unrefreshed because open bathing in the lake is restricted or forbidden by our municipal ordinances. It is gratifying to know that in this laudable movement to establish free baths for the people, Chicago has led all other American cities. It is stated upon what appears to be reliable authority that the Carter H. Harrison bath, opened in this City in 1894,

was the first permanent, or all-the-year-round, shower-bath to be established in the United States. Since then other cities have followed our example, and have begun the work of providing for the poor this simple yet effective agency for enabling them to observe what is universally recognized as the simplest and yet most imperative rule of health. As my hearty support has always been given to this movement, the action of your honorable body in appropriating \$12,000 for the erection of a new South Side bath, which was only recently completed and thrown open to the public, met my unqualified approval. Money thus expended to promote the cleanliness and health of the people is wisely appropriated; and I do not hesitate to recommend to your honorable body the further extension of the work until the people of each of the three divisions of the City are well provided with institutions equal, if not superior, to the ones we have constructed.

LAKE FRONT.

It is proper to refer here briefly to the settlement of the Lake Front controversy which was made during 1895, and was mentioned in my annual message last year. Since that time the wisdom of the settlement has become more and more realized by the public as the physical work upon the Lake Front has progressed. The fine suburban railway station, constructed wholly below the surface of the ground, is a source of comfort and pleasure to the many thousands of people who use it, not less than a benefit to the railroad company. The noise and smoke from railway trains and locomotives have ceased to be of material consequence to people living along or using the adjacent boulevard, and when electricity shall have been adopted as a motive power for suburban train service, as it doubtless soon will be, all cause for complaint against a long standing nuisance will seemingly disappear. It will no

doubt be several years before the Lake Front reaches an ultimate stage of development where it will compare with the other parks of the City, but all of these parks have required time to place them in their present condition, and already enough progress has been made on the Lake Front to indicate in a forcible way what was accomplished for the City in the settlement of this long standing and vexatious controversy.

TRACK ELEVATION.

In the matter of track elevation a gratifying progress has been made during the last two years. Ordinances have been passed for the elevation of a large portion of the Chicago & North-Western Railway on both its Milwaukee and Wisconsin divisions; of the Rockwell street tracks belonging to the Chicago & North-Western, the Pittsburg, Cincinnati, Chicago & St. Louis, and the Chicago & Northern Pacific Railways; and of a large portion of the Pittsburg, Ft. Wayne & Chicago Railway; also for extending the elevation of the Lake Shore and Michigan Southern Railway beyond the point prescribed in the original elevation ordinance relating to that line. All these ordinances have been accepted by the companies interested. An ordinance was also recently passed for the elevation of the so-called St. Charles Air Line now crossing several streets, including Michigan avenue boulevard, near Sixteenth street, and for doing away with the dangerous crossing upon Clark street near Sixteenth by a combination of track elevation, track depression and street elevation. At this writing this last ordinance has not been accepted by all the railway companies concerned, but only one is making any objections to it. The objecting company may or may not accept its provisions. If it does not, some way will be found to deal with it, and if it does, a complicated and troublesome problem will be happily solved. Few of our people have realized the extent of this problem. It

has been receiving my earnest attention for nearly two years, and at times the outlook has been extremely discouraging. Important and diverse interests of fifteen railway companies were affected. The Chicago & Western Indiana with its five tenants and owners—the Chicago & Eastern Illinois, the Chicago & Grand Trunk—the Wabash, the Louisville, New Albany and Chicago and the Chicago & Erie,—the Atchison, Topeka & Santa Fé, the Lake Shore & Michigan Southern, the Chicago, Rock Island & Pacific, the Chicago & Alton, the Chicago, Madison & Northern, the Chicago & North-Western, the Chicago, Burlington & Quincy, the Illinois Central and the Michigan Central—the last four being the joint owners of the St. Charles Air Line. Added to these were the interests of adjacent property owners and of the public at large. The combination of railway and street crossing required to be treated has often been pronounced by railway men to be the most complicated and troublesome grade crossing in the world. That it seems now to be so near abolition is due to unremitting and persistent labor, to persuasion and threats, and to compromises and concessions. If the plans of this ordinance are carried out substantially as fixed, the change in grade of the railway tracks will cost the companies interested about \$1,600,000, the estimated cost per mile being \$260,000. This includes the cost of seven subways to the mile.

The track elevation work already accomplished, or provided for under ordinances now in force covers 41.7 miles of tracks and 165 subways. It is substantial track elevation and not mere street depression. The street grades have been preserved so far as possible, thus avoiding the payment of heavy damages to property owners and at the same time preserving the appearance and utility of our streets as public thoroughfares.

In connection with the prosecution of this work due acknowledgment should be made of the valuable services

rendered by the members of the special Council Committee on Track Elevation, who have labored with untiring zeal in the performance of their duties. Much credit should be given to the Committee, and especially to its Chairman, nearly all of whose time has been devoted to this important matter for several years past.

In these track elevation matters, as in all matters, my purpose has been to bring about tangible, substantial results, of benefit to the City, and as far as possible to avoid the litigation and delay so commonly produced by controversy and drastic measures. The railroads of this City are great factors in the City's material growth and prosperity, while at the same time the City is of great benefit to them. It is therefore necessary that mutual fairness and consideration should be exercised in the treatment of all these problems, and it is in this spirit that we have always tried to meet the railway companies. It gives me pleasure to say that nearly all the railroad managers have met us in the same spirit. In negotiations involving enterprises of great magnitude, both in the work to be performed and in its cost, differences of opinion usually arise calling for mutual concessions on some equitable basis in order that a desired result may be accomplished. My experience with these railway crossing problems is quite in line with this reflection: many concessions have had to be made on both sides; but this policy has been rigidly adhered to, with patience and persistency, and with the justice of the City's position kept constantly in view. That it has been a wise policy is evidenced by the results accomplished and the material progress made.

NEW CITY CHARTER.

To only one more subject will your attention be here invited, but that is an important one. Some substantial changes should be made in our City incorporation law, and made without delay. At the present time one scheme of municipal government is provided for this vast City, with its extended and complicated affairs, and for every little community in the State having not less than one thousand inhabitants and ambitious enough to be under city organization. The existing general incorporation law doubtless works well enough in small localities, but in this City its defects are many and obvious. More power should be given to a Mayor, and in him should be vested the appointment, subject to confirmation by the Council, of such officers as the City Clerk, the City Attorney, and the City Treasurer, who could thus be held to a better responsibility for the performance of their respective duties, while the people would have but one executive officer to hold responsible. In my judgment, too, this Council has become too large a body, and I believe the interests of the City of Chicago would be better guarded and promoted if there were only half as many aldermen as at present, and perhaps, also, if one-half of those were elected upon a general ticket. The constitutional and statutory restrictions upon indebtedness and taxation are well enough as they stand, for while embarrassing in many ways, they are at the same time great safeguards against undue extravagance. There are too many forms of government within the City, and it is no wonder that the people are confused and do not know where their money goes, nor what officers to hold responsible in public affairs. Happily, public interest is becoming aroused upon this subject, and before long we may look for some improvement. You will recall that shortly after my assumption of this office an attempt was made to secure legislation

which should make our charter straight-jacket better fit our conditions; but the attempt was abandoned when it was found that the State constitution stood in the way of the desired action. None know better than the members of this body the restrictions and limitations which fetter our municipal action at almost every turn, and this honorable body can not do a wiser thing for the community than to continue the agitation for a new or improved City charter. The tendency in local affairs is toward a fear of power, and yet it will be clearly seen that only good has come from giving vast power to the chief executive officer, as well as to the legislative assembly, of the nation; and if this is true of the country at large, why is it not true of the fraction of it called a city? It must always be kept in mind, as once before observed, that the power to do the right thing will always involve the power to do the wrong thing, and it may be added that if there is no power to do the wrong thing, there will be no power to do the right thing. There must necessarily be some trust and confidence reposed in public affairs as in private ones. The power once given, the citizens must themselves do their part by electing good men, by watching their action, by holding them strictly responsible, and by fully performing their own civic duties.

CONCLUSION.

In conclusion, let me say what I believe you all know, that I welcome this hour in which I lay down my burden of official cares and responsibilities, and transfer to another my official title and authority. To me the latter have long ceased to be of equal personal consequence with the former. Few people understand what is involved in an effort to direct an efficient, honest and economical administration of the affairs of this great City, constituting one of the largest business corporations in the world. No man who makes the attempt can succeed to his own complete satisfaction under existing conditions, and

still less can he hope to satisfy fully and in all things his vast and varied constituency.

In a community of this magnitude, embracing nearly two millions of people and including all races, creeds and conditions, there must necessarily be much diversity of interest and of opinion in nearly all matters of public import. It often happens that while the Mayor is conferring with a delegation of respectable citizens who have called upon him to ask—or more likely to demand—that he approve a certain measure, or adopt a certain course, a like delegation is waiting to remonstrate against the same measure, or to demand a different course. Frequently disinterested, well intentioned citizens are misled by the specious arguments of interest or of malice, and being without actual knowledge of the matters at issue, but believing the right to be wrong and the wrong to be right, they seek strenuously to guide the Mayor's judgment or attack it when it has been exercised. There is little peace and quiet for a Mayor even in his own home, where he is followed and harassed by all kinds of troubles and by all classes of people, generally well-meaning. These incidents are not cited in a spirit of complaint, but merely to illustrate the difficulties of this office and to point out how the community itself, thoughtlessly, and generally unprofitably, adds to the burdens and embarrassments of its chief executive officer. How much easier and how much better it would be if the people would more frequently indulge in some presumption that the Mayor understands, or will try to learn, something of his duty, and knowing, will perform it. In the main, however, there has been manifested towards me, a hearty spirit of co-operation and support which has been greatly appreciated.

The various officers and employes of this City are here given my earnest thanks for the aid they have rendered to me in my work. To all the heads of departments, particularly, my

warm acknowledgments are due. And in taking final leave of this body, I desire to express to each member of it my sincere gratitude for courtesy and kindness shown me, and for the assistance you have given me in the discharge of my duties as your presiding officer. It has been my aim at all times to be fair in my rulings and to preside over your proceedings in such manner as to facilitate the intelligent and speedy transaction of the public business. But my efforts would have been of little avail without your kindly consideration and support. Let me bespeak for my successor a manifestation of the same spirit and wish for him and for this body the greatest success in all things.

Respectfully submitted,

GEORGE B. SWIFT,

Mayor.

INAUGURAL ADDRESS
OF
MAYOR HARRISON

MAYOR HARRISON'S INAUGURAL ADDRESS.

Gentlemen of the Council:

Sustained by the confidence and good will of 148,000 citizens of the city of my birth, I assume to-night the duties of the office of Mayor. He would be a reckless man indeed who could face this representative gathering, standing as it does for the courage, the enthusiasm, the unconquerable energy of the second greatest city of the American continent, without feeling deeply impressed by the magnitude of the undertaking. Fully realizing the gravity of the obligations and with no desire to shirk a single responsibility, I wish to renew the pledge made the electorate of Chicago at different times during the campaign, to give for the next two years my time, my energy and my best endeavor to serve faithfully all interests of the great City that has honored me with its confidence.

This is no longer the time for words. It is by action, and by action alone, we can now show the good faith of the pledges upon which we have been chosen. The victory of this spring has been brought about by a campaign honestly and decently conducted along lines of municipal reforms. It is due to the support of citizens of all classes, of all nationalities. The population of our City is no more cosmopolitan in its character than the support which has placed power in our hands. And the more flattering this signal token of general confidence, the more earnest should be our endeavor to show a proper appreciation.

At this time no action is of greater or more far-reaching importance than such action as will restore the confidence of the outside world in the capacity of Chicago to furnish adequate security to all investors who may desire to bring here and to invest their means. Misrepresentations on the part of certain journals and a confessed inability of the authorities at times to cope successfully with the criminal classes has shaken the confidence of many who in the past have earnestly desired, and to-day are willing, to employ our labor and to assist in the development of local industries. Ample security must be provided every interest. Labor must be protected, the laws must be enforced and order must be maintained. The public offices must be filled with competent men and all City affairs must be administered economically, honestly and in a business-like manner. The burden of taxation, now pressing heavily upon our property owners, must be lessened. The expenses of administration, in all directions where the health and security of the citizens are not involved, must be curtailed. Competent men in office, not offensively partisan, should be retained. By the employment of these methods, and these methods alone, can better conditions be brought about, and a renewal of confidence in the integrity of Chicago be obtained.

To effect these results, one man, whatever his position, can do but little without the active and hearty assistance of not only the press, but the great mass of the people. And to-night, in assuming the cares and responsibilities of one of the greatest offices in the gift of the American people, I appeal to all patriotic citizens, regardless of party, to earnestly co-operate with me in the work of bringing about a renewal of confidence and the establishment of better times in the community. I make this appeal to the patriotism of Chicago, that patriotism which, in but little more than a half century, has metamorphosed a swamp into one of the world's greatest metropolitan centers,

which gave to civilization the greatest Fair in history, and which to-day, just beyond our borders, is completing an almost unparalleled engineering feat. I have every confidence that I will not make this appeal in vain.

In my efforts to give a careful, economical administration, it is necessary I should have the constant, active assistance of this honorable body. With your aid great results can be obtained, without it but little can be accomplished. From to-night we will be making history, and two years hence this administration will be known as honest and economical, or utterly profligate and wasteful, as this Council will to a great extent determine. For my part, you gentlemen of the Council can count upon an active, cordial co-operation in all things that will advance the best interests of the community. We have been chosen to administer a trust and our future will depend upon the report we shall make two years from to-night.

Very respectfully,

CARTER H. HARRISON,

Mayor.

Department of Public Works, City of Chicago.

JOSEPH DOWNEY,
Commissioner.

JOHN A. MOODY,
Deputy Commissioner.

J. J. GRAHAM,
Assistant Secretary.

Heads of Bureaus.

| | |
|--|-----------------|
| CITY ENGINEER, | L. B. JACKSON |
| SUPERINTENDENT OF SEWERS, | G. L. CLAUSEN |
| SUPERINTENDENT OF SPECIAL ASSESSMENTS, | H. J. JONES |
| SUPERINTENDENT OF WATER BUREAU, | J. C. CRAIG |
| SUPERINTENDENT OF STREET BUREAU, | R. J. MacDONALD |
| SUPERINTENDENT OF MAP BUREAU, | O. L. WULLWEBER |
| SUPERINTENDENT OF STREET AND ALLEY CLEANING, | J. C. W. RHODE |
| DEPARTMENT BOOK-KEEPER, | L. E. GOSSELIN |

PAST COMMISSIONERS OF PUBLIC WORKS.

WATER BOARD.

- 1851-54—John B. Turner, Prest., Horatio G. Loomis, Alson S. Sherman.
1854-56—James H. Woodworth, Prest., John C. Haines, George W. Dole.
1856-58—George W. Dole, Prest., Orrington Lunt, John C. Haines.
1858-60—George W. Dole, Prest., Orrington Lunt, Noah Sturtevant.
1860-61—Orrington Lunt, Prest., Edward Hamilton, Benjamin Carpenter.

SEWERAGE BOARD.

- 1855-59—Wm. B. Ogden, Prest., James D. Webster, Sylvester Lind.
1859-61—James D. Webster, Prest., Sylvester Lind, Philip Conley.

Water and Sewerage Boards merged May 6, 1861, into

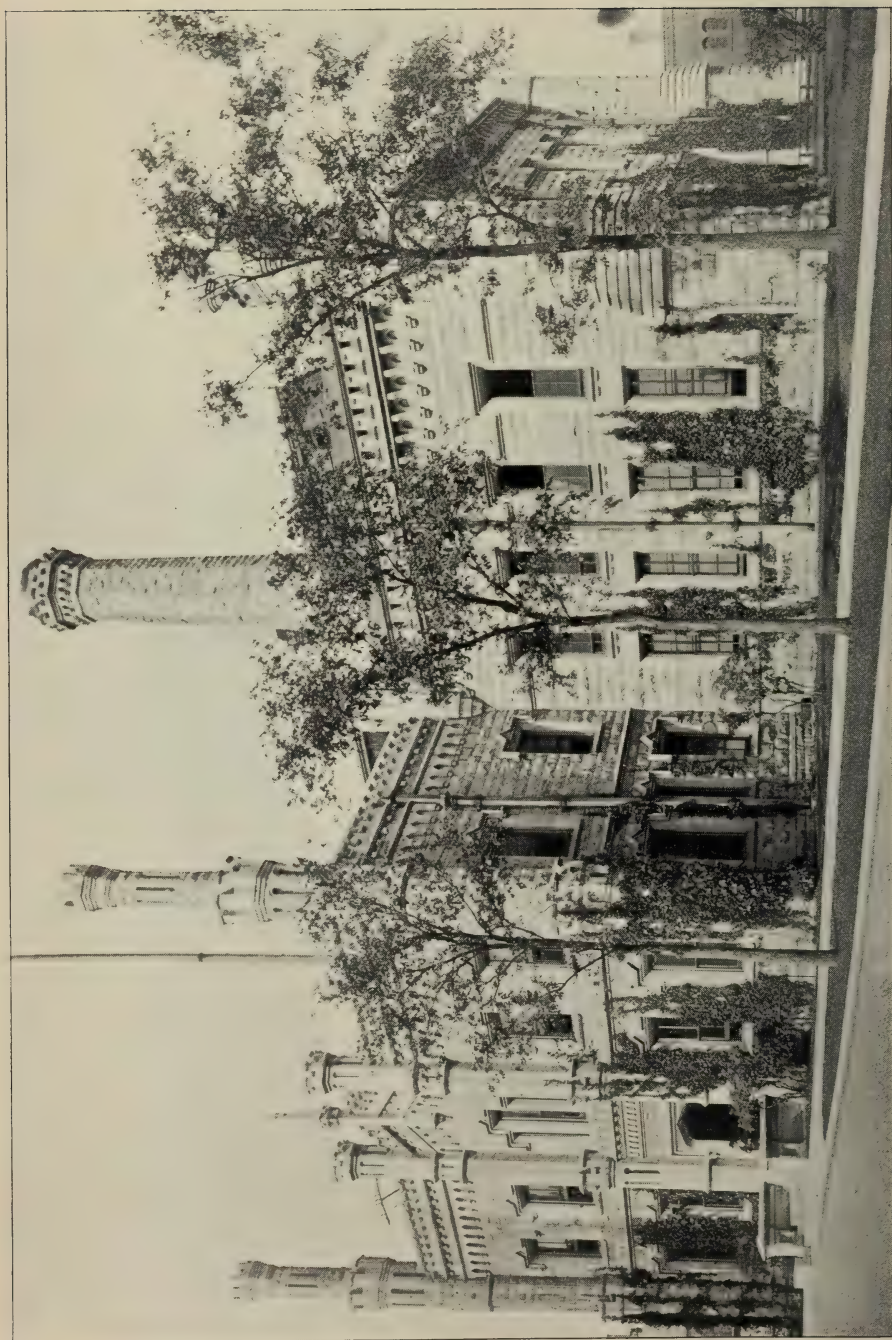
BOARD OF PUBLIC WORKS.

- 1861-63—Benjamin Carpenter, Prest., John G. Gindele, Frederick Letz.
1863-65—Francis C. Sherman, Mayor, *ex-officio* member of the Board.
1863-67—John G. Gindele, Prest., Frederick Letz, Orrin J. Rose.
1867-69—Aug. H. Burley, Prest., Wm. H. Carter, John McArthur.
1869-71—John McArthur, Prest., Wm. H. Carter, Redmond Prindiville.
1865-69—Wm. Gooding and Roswell B. Mason, members of the Board in matters pertaining to the cleansing of the river.
1869-71—Wm. Gooding and Edward B. Talcott, members of the Board in matters pertaining to the cleansing of the river.
1871-73—Wm. H. Carter, Prest., Jas. K. Thompson, Redmond Prindiville.
1873-76—Redmond Prindiville, Prest., Louis Wahl, Jas. K. Thompson.

Board of Public Works abolished September 18, 1876, and on the same date there was established by the City Council

THE DEPARTMENT OF PUBLIC WORKS.

- 1876-78—Monroe Heath, Mayor, Acting Commissioner.
January 7, to May 18, 1879—E. S. Chesbrough.
May 19, 1879, to October 18, 1881—Charles S. Waller.
October 19, 1881, to February 4, 1882—Carter H. Harrison, Mayor, Acting Commissioner.
February 4, 1882, to January 31, 1886—DeWitt C. Cregier.
February 1, 1886, to June 28, 1886—Carter H. Harrison, Mayor, Acting Commissioner.
June 28, 1886, to April 11, 1887—W. H. Purdy.
April 12, 1887, to April 15, 1889—George B. Swift.
April 16, 1889, to April 27, 1891—W. H. Purdy.
April 28, 1891, to December 24, 1892—J. Frank Aldrich.
December 24, 1892, to April 25, 1893—E. Louis Kuhns, Acting Commissioner.
April 25, 1893, to November 21, 1894—Hiram J. Jones.
November 21, 1894, to November 28, 1894—John A. Moody, Acting Commissioner.
November 28, 1894, to April 8, 1895—John McCarthy.
April 8, 1895, to July 20, 1896—William D. Kent.



NORTH PUMPING STATION

REPORT OF THE
Commissioner of Public Works

CITY OF CHICAGO

COMMISSIONER'S REPORT.

OFFICE OF THE COMMISSIONER OF PUBLIC WORKS, }
CITY HALL. }

*To the Honorable, the Mayor and the City Council
of the City of Chicago:*

GENTLEMEN:—In pursuance of the ordinances of the City, I present to you herewith this the Twenty-first Annual Report, which includes in detail the records of the construction and management of all public improvements coming under the jurisdiction of the Department of Public Works for the year ending December 31, 1896.

The year began with William D. Kent, Commissioner of Public Works, and upon his retirement the present incumbent was appointed, and entered upon the duties of the office July 20th, 1896, leaving about five months to close the business of the year. In consequence of the advanced stage of the season much of the work for constructing public improvements and for furnishing and delivering materials and supplies had been contracted for by the retiring Commissioner, leaving the details of completing such contracts to the supervision of the present Commissioner. An early experience and investigation into the duties of my office developed the necessity for a vigilant policy in all matters of public business coming under the jurisdiction of my Department, and also revealed a responsibility which is magnified by the ever-increasing demands of a great and growing city. With a population of nearly two million souls, and a superficial area of 188 square miles, we have 2,500 miles of streets to improve and repair, which, in addition to the extension and maintenance of the great water and drainage system of the City, may be rightly considered a matter of some magnitude. The demand of

enlarging these improvements is made necessary by the extension of street car lines in the outlying districts of the City, with other means of rapid transportation to the business centers, which have opened up new and heretofore unoccupied territory, where now large settlements are being established by those seeking inexpensive homes. These settlements draw largely upon the funds of the City for benefits and improvements each year, while the revenue derived from such thinly settled localities is insufficient to meet such demands. These, with other improvements of various grades of importance are forcing themselves constantly upon this Department, all requiring prompt attention and the expenditure of large sums of money, which would, if conceded, quickly absorb the funds of the Department. Being aware of the existence of needed improvements in all sections of the City, which cannot be reached in consequence of a limited appropriation, and desiring to meet the most urgent, keeping in view a just distribution of the funds in each district, it was deemed expedient to so adjust the expenditures of the various sub-departments as to meet, so far as possible, such demands as would contribute the greatest comfort and convenience to those most needy, while still keeping within the limits of the appropriation.

In view of the many obstacles to the desirable advancement of general public improvements, it is just to remember that Chicago, in comparison with the large cities of the East, is yet a young and unfinished metropolis, still laboring under the disadvantages of a defective City charter, and unwise State laws, which are depriving the City of the ability to provide an adequate revenue, and are perpetuating an irrational, cumbersome and expensive City, County and Town government, complicating and retarding public business at the expense of the tax-payers, and to the inconvenience of all citizens. These are and should be recognized as fatal evils to the prosperity of the City, which can never be remedied until a unanimous public sentiment shall demand a government worthy of the great City of Chicago. With all these disadvantages and adverse circumstances the wonderful growth of the City is the more marvelous, for even handicapped thus, her rapid march during the last half century has given her the proud position of second city in population in the United States, with a destiny which will place her at the head of the list of great cities of the continent at her century celebration.

With such a grand and magnificent outlook, there should be no delay in securing such legislation as would permit the City to abolish the present system of government, and in its stead establish under

one chief executive, and an administrative body of officers, a municipal government which should be a perfect model of its kind, and worthy of the present and future greatness and glory of the City.

The seeming large amount of funds placed at the disposal of this Department annually to meet the costs of construction, extension and maintenance of the public works of the City reaches approximately the sum of \$9,000,000, which is provided for by appropriation, special assessments, water collections, and minor sources of revenue. From this amount there has been expended for new water tunnels, water pipe extension, pumpage and other expenses, \$3,342,490.42; for sewerage extension and maintenance, \$338,973.18; for street and alley paving and sidewalk construction, \$3,357,759.80; for street and alley cleaning and for salaries and other expenses payable from such fund, aggregating \$2,250,458.97.

The record of the distribution of such funds appears in detail in the bookkeeper's statement of this report, and exhibits satisfactory evidence of a conservative and economical expenditure of the same. This, with an enforcement of a business principle exacting the best energy and skill of those having charge of the construction of public works, has made it possible for the Department to increase the magnitude of its work to a greater extent than could have been accomplished under a less vigorous and less economic policy.

The City has also been benefited by the establishment of a more thorough system of City inspection upon all classes of work, based upon the selection of persons whose intelligence, integrity and experience have fitted them for such work. With this system in successful operation, and a frequent personal examination of the most intricate and important lines of construction, the Department has secured for the City a superior class of workmanship and material, and has established a higher and more substantial grade of public improvements.

Notwithstanding the retrenchments thus made the City has suffered no loss in consequence of neglect or delay in the prosecution of the work of the Department; on the contrary, it has accomplished more satisfactory results in establishing a systematic organization and classification of City labor, with a material saving of funds under a judicious abandonment of all needless and unimportant public improvements.

STREETS.

The report of the Superintendent of Streets shows the number of miles paved with cedar blocks is nearly equal to the amount paved with all other classes of material. The use of sheet asphalt and vitrified brick for street paving is increasing in favor each year, and the three classes may be considered as standard in street paving in this City.

There is nothing of importance to add to the suggestions made in former reports concerning the merits of the various classes of street paving. The recommendations of scientific engineers, and the opinions of practical and experienced road builders have added nothing valuable of late to the science of road construction.

It is reasonable, however, to recommend and urge the construction of a substantial and permanent sub-structure or foundation, with such finish as will form a water-tight shed and will prevent the escaping of poisonous gases or offensive odors from all underground works. Such construction not only recommends itself as a perfect foundation for receiving the material for wearing surface, but it is indispensable as a sanitary measure, and should be regarded of paramount importance in all street improvements.

The prominence secured and other benefits coming to a city with well paved and well kept streets can never be overestimated. Such a condition increases values and gives comfort and convenience to citizens; it is an evidence of public spirit and stimulates a commendable pride and ambition to improve and beautify homes. Visiting strangers pass judgment upon the character and refinement of citizens by the condition of their streets, and the standard of official enterprise and efficiency is measured by the high or low grade of a city's improved thoroughfares.

In presenting this report I desire respectfully to submit to the Honorable Mayor and City Council a suggestion in regard to the adoption of a better system for improving streets in the residence portion of the City, and a method which shall secure protection against objectionable encroachments upon choice and valuable residence property.

Under present conditions it is well known that the best endeavors of citizens toward embellishing and beautifying their surroundings may be defeated, and a most commendable pride and ambition be paralyzed by the introduction of some highly objectionable feature near to or adjoining some costly home, against which the citizen would have absolutely no redress.

To avert so great a misfortune and secure to such citizens the protection and encouragement to which they are justly entitled, I would suggest to your honorable body the advisability of soliciting such legislation as shall authorize the City Council, upon application of a majority of the property owners, to set apart a number of streets to be dedicated and known as a "Home park district," and to place the same under the jurisdiction and management of the Department of Public Works, under the conditions and the legal powers (with appropriate modifications) which now govern the various Boards of Park Commissioners, such legislation to legalize the action of the Department of Public Works in spreading a special assessment upon the property benefited and located within the limits of such district, for the construction and maintenance of public improvements, such improvements to include the establishment of a uniform construction of roadway and walks, the cultivation of trees and lawns, the cleaning, sprinkling and removal of obstructions from streets and walks, the whole to include vacant as well as improved property.

Further authority should be delegated to prohibit the construction of buildings, or use of property for anything other than for residence purposes, and to prevent vacant grounds or buildings being located, occupied or used in any manner as shall in any way injure or detract from the value or desirability of adjoining property.

While such streets or districts could never be included in the boulevard system, nor come under the control of the Park Boards, the advantages to be attained by the adoption of such methods would be incalculable, and the financial and other material benefits resulting would be in a line with if not equaling those which now accrue to property fronting the boulevards; thus encouraging the establishment of permanent homes within the limits of the City, instead of such movements being diverted to the suburbs, and to stimulate the development of more elegant homes, with superior designs of architecture and a higher and more uniform grade of street improvements, all of which would add materially to the attractiveness of the City.

WATER SUPPLY SYSTEM.

The pumping stations are in good repair. An additional engine for the Lake View pumping station has been contracted for which will be in operation about June 1, 1897. New engines are also needed at Chicago avenue, Fourteenth street and Sixty-eighth street pumping stations, in order to give the City satisfactory service.

During the year 93,040,314,218 gallons of water have been pumped into the City mains, an average of 254,208,509 gallons per twenty-four hours. Estimating the population at two millions, this consumption is at the rate of 127 gallons per capita per day.

The City is drawing its water from the lake through the following tunnels :

LAKE VIEW TUNNEL.

6 ft. diameter, length 10,000 feet, supplying Lake View Pumping Station.

CHICAGO AVENUE LAKE TUNNELS.

| | | |
|-------------------------------------|---|----------------------------------|
| 5 ft. diameter, length 10,560 feet. | } | Supplying North Pumping Station. |
| 7 ft. diameter, length 10,560 feet. | | |
| 7 ft. diameter, length 10,560 feet. | | |

CHICAGO AVENUE LAND TUNNEL.

7 ft. diameter, length 20,856 feet, being an extension of 7-foot lake tunnel from Chicago Avenue Pumping Station to West Pumping Station.

FOUR-MILE LAKE TUNNEL.

| | | |
|-------------------------------------|---|--|
| 8 ft. diameter, length 9,139 feet. | } | From Four-Mile Crib to Park Row shaft. |
| 6 ft. diameter, length 25,200 feet. | | |

FOUR-MILE LAND TUNNEL.

| | | |
|------------------------------------|---|---|
| 8 ft. diameter, length 516 feet. | } | From Park Row shaft, supplying Fourteenth Street Pumping Station. |
| 6 ft. diameter, length 2,320 feet. | | |

The specifications provided for an 8-foot tunnel from the four-mile crib to Park row shaft and thence to the Fourteenth street pumping station, but owing to the character of the soil it was found necessary to split the 8-foot tunnel into two 6-foot tunnels, as shown on the diagram.

| | | |
|------------------------------------|---|---|
| 7 ft. diameter, length 7,053 feet. | } | From Park Row shaft, supplying Central Pumping Station. |
| 6 ft. diameter, length 480 feet. | | |

JEFFERSON STREET CONNECTION.

6 ft. diameter, length 625 feet, between Chicago Avenue Land Tunnel and Four-Mile Crib.

SIXTY-EIGHTH STREET TUNNELS.

| | | |
|--|---|--|
| 7 ft. diameter, length 5,037 feet. | } | From Two-Mile Crib, supplying Sixty-Eighth Street Pumping Station. |
| 5 ft. diameter, length 8,030 feet. | | |
| 6 ft. diameter, length 5,026 feet, from submerged crib, supplying Sixty-Eighth Street Pumping Station. | | |

This system makes the present nominal engine capacity as follows :

| | |
|--------------------------------------|-----------------------------------|
| Lake View Pumping Station, | 31,500,000 gallons per 24 hours. |
| North Side Pumping Station, | 99,000,000 gallons per 24 hours. |
| Central Pumping Station, | 36,000,000 gallons per 24 hours. |
| Fourteenth Street Pumping Station, | 54,000,000 gallons per 24 hours. |
| West Side Pumping Station, | 60,000,000 gallons per 24 hours. |
| Sixty-eighth Street Pumping Station, | 74,000,000 gallons per 24 hours. |
| Total, - - - | 354,500,000 gallons per 24 hours. |

All these engines draw their water from the lake through tunnels. There are, besides, small pumping stations at Washington Heights and Norwood Park, which draw their water from artesian wells.

TUNNELS.

The nominal tunnel capacity is as follows :

| | |
|-----------------------------------|-----------------------------------|
| Lake View Tunnel, | 72,000,000 gallons per 24 hours. |
| Two-Mile Tunnels, | 250,000,000 gallons per 24 hours. |
| Four-Mile Tunnel, | 140,000,000 gallons per 24 hours. |
| Sixty-eighth Street Tunnel, | 122,000,000 gallons per 24 hours. |
| Total, - - - | 584,000,000 gallons per 24 hours. |

TUNNEL AND CRIB CONSTRUCTION.

LAKE VIEW TUNNEL.

This tunnel, which was commenced in 1889, was finished to the outer crib, 10,000 feet from shore, and placed in service during the year.

NORTH SHORE INLET EXTENSION.

The completion of this tunnel during the year adds a third tunnel to the system supplying the Chicago avenue pumping station from the two-mile crib. The latest extension is 6,000 feet in length.

NEW LAND TUNNELS.

The construction of this new system of tunnels, which will supply two new proposed pumping stations, was commenced in the latter part of 1895.

SECTION ONE.

Section one begins at the foot of Oak street on the lake shore and extends to the intersection of North Green street and Grand avenue, The diameter of this tunnel is ten feet. At the close of the year,

6,058 lineal feet of this tunnel had been constructed, leaving a balance unfinished of 2,608 feet.

SECTION TWO.

Section two is an extension of section one, in a southwesterly direction, to the proposed pumping station at Central Park avenue and Fillmore street. This tunnel has a diameter of eight feet. There have been 9,946 feet of this tunnel completed or excavated, leaving 9,879 feet yet to be constructed.

SECTION THREE.

Section three is the northwest branch of this system, commencing at the intersection of North Green street and Grand avenue and extending to the proposed pumping station at Springfield avenue and Bloomingdale road. There have been completed or excavated 3,748 feet, making the remaining portion to be constructed, 18,477 feet.

NORTHEAST LAKE TUNNEL.

This tunnel, ten feet in diameter, is the lake extension of the new land tunnels. It connects with the east end of the land tunnel and runs in a northeasterly direction to a proposed crib four miles from shore. Of this tunnel, 1,280 feet were completed during the year.

SIXTY-EIGHTH STREET TUNNEL EXTENSION.

This tunnel is an extension of the seven-foot tunnel, constructed in 1893 and 1894, from its west end to shore, a distance of about 5,300 feet, of which 2,136 feet had been completed at the end of 1896.

DIVISION OF BRIDGES AND VIADUCT CONSTRUCTION.

DIVERSEY AVENUE BRIDGE.

This bridge was opened for traffic January 11, 1896. Its total cost was \$31,345.10.

WELLS STREET BRIDGE.

This bridge has been altered during the year to a double deck structure, to be used for the Northwestern "L" road. The expense of this alteration was borne by the "L" road company.

SOUTH HALSTED STREET VIADUCT.

This structure, which spans the Union Stock Yards and Transit Company's tracks at Fortieth street, was opened for traffic September 5, 1896. The cost, \$83,594.12, was borne by the railroad company.

NORTH HALSTED STREET BRIDGE.

This bridge is a rolling bascule bridge and crosses the river at North Halsted street. The structure is operated by electricity and compressed air. The bridge was nearly completed at the end of the year; cost about \$114,000.

BRIDGE AND VIADUCT MAINTENANCE.

The expense incurred in the maintenance of all bridges and viaducts for the year 1896, including labor, material, supplies, etc., has been \$127,924.79.

HARBORS OF CHICAGO.

During the year dredging has been done in the Chicago and Calumet rivers as follows :

By the City :

South branch and main Chicago river, 10,710 cubic yards.

North branch, by Halsted street bridge. 40,630 " "

51,340 " " \$10,332 99

By dock owners under permits from the Department of Public Works :

Chicago river, fees, \$809 50.....123,200 cubic yards.

Calumet river, " 556 00.....102,200 " "

225,400 " " \$45,080 00

Under a recent Act of Congress, the general government, for the first time in the history of the City, applied United States funds to the dredging of the Chicago river, west of the angle next east of the Illinois Central Railroad bridge at the river's mouth. Maj. Marshall, of the Corps of Engineers, U. S. A., under contracts for the north and south branches of the Chicago river, as far as Belmont avenue and South-western avenue bridges respectively, had the following dredging done :

North branch, Chicago river, 54,920 cubic yards, \$5,327 24

South branch, " " 78,408.7 " " 8,546 55

and the improvement of the Calumet river has been continued by the general government — dredging having been done to the amount of 295,073.4 cubic yards, costing \$30,568.82, making a total done during the year by the United States of 428,402.1 cubic yards, costing \$44,442.61.

The total improvement by dredging both harbors of the City is 705,142 cubic yards, costing \$99,855.60.

The contracts with the United States, in operation during the year 1897, contemplate dredging 1,399,397 cubic yards, to cost \$148,310.42 ;

of this, 225,596 cubic yards at \$29,891.47 is to be done in the southern harbor of the City.

Under permits from the Department—

5,577 feet of old docks were repaired.

5,091 feet of old docks were rebuilt.

250 feet of new docks were constructed during the past year and the City also built 200 feet of new dock at the new Water Works Shops and in canal "A" at the West Side Water Works.

The water in Lake Michigan was very low during the year; the highest elevation at the two-mile crib at any time during the year was only equal to the low water of 1847, its average elevation during the year being seven inches below datum, and its lowest stage was twenty inches below low water of 1847, or City datum.

Our commerce by the lake, although subjected to many inconveniences by reason of general low water, increased, however, 334,632 tons over the tonnage for 1895.

The following is our commerce by lake for the year 1896:

| | | | |
|--|----------------|-----------------|-------------|
| Chicago river..... | 7,154 vessels, | 4,787,250 tons, | entrances. |
| Chicago river..... | 7,102 " | 4,719,522 " | clearances. |
| Calumet river | 1,293 " | 1,641,174 " | entrances. |
| Calumet river | 1,450 " | 1,817,866 " | clearances. |
| Total trade by lake, City of Chicago, 16,999 | " | 12,965,812 | " |

Our trade by lake for the ten years from 1871 to 1880, shows an average annual gain of $37\frac{4}{10}$ per cent. over the average annual trade for the period from 1862 to 1870, inclusive, and our average annual trade for the ten years from 1881 to 1890, inclusive, shows an increase of $27\frac{4}{10}$ per cent., even greater than the average annual trade of the preceding decade; while our average annual trade for the last seven years goes still higher than that for the ten years ending 1890, by the gratifying figures of $32\frac{7}{10}$ per cent., the carrying capacity of our vessels increasing by an annual average of $68\frac{6}{10}$ per cent. over that for the ten years ending 1890.

EXTENSION OF THE WATER PIPE SYSTEM.

Water pipes were laid during the year as follows:

| | |
|-----------------------------|---------------|
| Four (4) inch..... | 5,099 feet. |
| Six (6) inch | 295,435 feet. |
| Eight (8) inch..... | 108,709 feet. |
| Twelve (12) inch | 21,308 feet. |
| Sixteen (16) inch | 31 feet. |
| Twenty-four (24) inch | 2,020 feet. |

Total.....432,602 feet.

The whole being equal to $81\frac{492}{5280}$ miles. Small pipe taken up or abandoned $3\frac{452}{5280}$ miles. Net pipe added to the system during the year, $78\frac{447}{5280}$ miles, making a total of $1,691\frac{1133}{5280}$ miles of water mains in use at the end of year 1896 within the City limits.

| | |
|---|---------|
| Fire hydrants placed in position during the year . | 928 |
| Net number of hydrants added to the system.... | 909 |
| Total number of fire hydrants now in use | 17,375 |
| Stop valves put in place during the year | 852 |
| Net number of valves added to the system..... | 834 |
| Total number of valves now in use | 12,907 |
| 12,932 new house-service taps were added, making a total of | 276,240 |
| 12,932 new house-service pipes were added, mak- ing a total of..... | 276,240 |
| The number of service taps inserted in water mains, including re-taps and taps inserted for enlarged service pipes to buildings pre- viously supplied, is..... | 13,672 |

WATER METERS AND HYDRAULIC ELEVATORS.

| | |
|--|-------|
| Number of new meters put in during the year 1896..... | 263 |
| Number of old meters removed | 106 |
| Net increase | 157 |
| Total number of meters now in use..... | 5,106 |
| Total number of meters repaired | 2,614 |
| Number of City meters removed and replaced by new ones.... | |

The revenue derived from water measured by these meters and hydraulic elevators for the past year amounted to \$1,039,283.43.

STREET AND ALLEY IMPROVEMENTS.

STREETS AND ALLEYS.

During the year 78.32 miles of streets and 4.33 miles of alleys, a total of 82.65 miles were paved.

Streets curbed and filled, 3.42 miles.

SIDEWALKS.

During the year 150.84 miles of plank sidewalk, 82.73 miles of concrete walk, and 3.03 miles of stone walk were constructed; a total of 236.60 miles.

1.65 miles of concrete walks were constructed by the various Park Boards.

Thus the grand total for the year is 238.25 miles.

FINANCIAL.

| | |
|--|-----------------------|
| Amount paid contractors for street improvements by special assessments | \$1,712,305 21 |
| For sidewalks built by the Bureau under special assessment | 30,879 13 |
| For re-paving and repairing improved streets | 196,306 39 |
| For grading, ditching, building and repairing aprons, culverts, crossings, etc., on unimproved streets | 125,621 60 |
| For sidewalks, general repairs and intersections | 70,518 48 |
| For City Parks | 12,299 73 |
| For new and repaired street lamps and signs | 52,712 90 |
| Grand Total | <u>\$2,200,643 44</u> |

WATER OFFICE.

COLLECTIONS.

The net receipts of this office from all sources amounted to \$3,226,559.73. A further sum of \$23,757.77 is properly creditable to this year's business, the same having been paid out by drawbacks from this year's collections for vacancies occurring during 1894, as provided for in the ordinance of January 14, 1895, making a total of \$3,250,317.50. These figures show an actual increase in the collections of 1896 over 1895 of \$9,828.44.

SERVICE PIPES.

During the year 5,586 service pipes were laid, at an average cost of \$12.18.

PLUMBERS' LICENSES.

Plumbers' Licenses to the number of 551, at a profit to the City of \$10.00 each, making a total of \$5,510.00.

INSPECTION DEPARTMENT.

By a special inspection of the entire City, this branch of the Bureau increased the assessment \$45,000 per year.

Following is a table showing, among other things, the appropriations for Public Works from 1888 to 1896, increase of population and area during the same period, and other matters of interest connected with the work of the Department :

| YEAR. | Appropriation. | Expenses. | Square Miles of Territory. | Census. |
|------------|----------------|----------------|----------------------------|-----------|
| 1888 | \$1,942,495 65 | \$2,057,422 79 | 37 | 802,651 |
| 1889 | 2,317,291 20 | 2,220,365 30 | 37 | 880,000 |
| 1890 | 2,581,445 20 | 2,492,808 45 | 100 | 1,208,669 |
| 1891 | 2,429,644 05 | 2,929,431 47 | 180 | 1,350,000 |
| 1892 | 2,597,148 17 | 2,508,771 98 | 180 | 1,438,010 |
| 1893 | 2,703,175 36 | 2,845,571 38 | 186.2 | 1,500,000 |
| 1894 | 1,979,863 85 | 2,220,321 43 | 186.2 | 1,600,000 |
| 1895 | 2,026,568 53 | 2,024,542 06 | 186.2 | 1,725,000 |
| 1896 | 1,780,557 93 | 1,777,337 11 | 186.2 | 1,800,000 |

| YEAR. | Number of Miles of Paved Streets. | Number of Miles of Unimproved Streets. | Cost of Cleaning and Repairing Improved and Unimproved Streets. | Amount of Appropriation per Square Mile of Territory. | Amount of Appropriation per Capita. | Cost per Mile of Cleaning and Repairing Improved and Unimproved Sts. |
|------------|-----------------------------------|--|---|---|-------------------------------------|--|
| 1888 | 348 | 314 | \$345,204 69 | \$52,499 88 | \$2 42 | \$521 45 |
| 1889 | 348 | 314 | 477,866 65 | 62,629 49 | 2 63 | 721 85 |
| 1890 | 669 | 1,567 | 583,468 69 | 14,341 36 | 2 13 | 260 94 |
| 1891 | 774 | 1,559 | 803,171 02 | 13,498 02 | 1 79 | 344 26 |
| 1892 | 879 | 1,493 | 896,017 02 | 14,428 60 | 1 80 | 377 74 |
| 1893 | 1,007 | 1,459 | 999,558 58 | 14,494 23 | 1 80 | 405 33 |
| 1894 | 1,086 | 1,400 | 696,627 99 | 10,615 89 | 1 23 | 280 22 |
| 1895 | 1,123.54 | 1,406.63 | 681,234 06 | 10,883 82 | 1 17 | 269 24 |
| 1896 | 1,183.64 | 1,494.61 | 589,944 43 | 9,562 53 | 1 01 | 220 21 |

Of the 1,183.64 miles of pavement 108.62 are alleys, but in the total mileage of 2,569.63 miles are treated as streets.

STREET IMPROVEMENTS.

There were 82.65 miles of streets improved during the past year.

There were 233,147 square yards of street pavement repaired.

| | |
|---|-----------------|
| Total streets in the City..... | 2,569.63 miles |
| Total alleys in the City..... | 1,340.03 miles |
| Total streets paved in the City..... | 1,075.02 miles |
| Total alleys paved in the City | 108.62 miles |
| New sidewalks constructed | 238.25 miles |
| Sidewalks repaired..... | 3.08 miles |
| Total sidewalks in the City..... | 4,863.10 miles |
| Streets cleaned (under contract)..... | 13,807.89 miles |
| Number of aprons, culverts, crossings, etc., built..... | 5,512 |
| Sidewalk intersections constructed..... | 1,855 |
| Number of street lamps (gas) | 42,180 |
| Number of street lamps (oil and gasoline)..... | 10,258 |
| Number of street lamps (electric)..... | 1,765 |
| Total number of street lamps in the City | 54,203 |
| Temporarily discontinued (gas lamps) | 652 |
| Number of buildings removed | 855 |

MISCELLANEOUS.

SPECIAL IMPROVEMENTS.

Substructure of North Halsted street bridge.

Superstructure of North Halsted street bridge.

Substructure of South Halsted street bridge.

Superstructure of South Halsted street bridge.

Compressed air and electric equipment for North Halsted street bridge.

Machinery and locks for North Halsted street bridge.

Cast-iron water pipe.

Water tunnel and crib, Lake Michigan.

Water tunnel at Sixty-eighth street.

Building lake crib for Sixty-Eighth street tunnel.

Removing inner Hyde Park crib.

Erecting sewerage pumping station.

Sewerage pumping engines.

Electric machinery, dynamos, engines, and filling and grading grounds for Isolation Hospital.

Bath house building on Wentworth avenue.
 Frame fire engine house, 95th street and Cottage Grove avenue.
 Observation tower, lake front, Oak street.
 Constructing repair shop, Ashland avenue.

CONTRACTS.

Contracts were entered into by the City during the past year for paving and improving streets and alleys, and for constructing various public works; also for furnishing various classes of material and supplies, aggregating an expenditure of \$5,251,254.86, distributed as follows:

| | |
|---|----------------|
| 193 Contracts for street and alley improvements, at a cost of..... | \$1,863,572 73 |
| 1 Contract for curbing, filling and grading streets, aggregating | 1,744 00 |
| 1 Contract for substructure of North Halsted street bridge | 40,590 12 |
| 1 Contract for superstructure of North Halsted street bridge | 54,500 00 |
| 1 Contract for substructure of South Halsted street viaduct | 48,270 60 |
| 1 Contract for superstructure of South Halsted street viaduct | 30,657 00 |
| 1 Contract for compressed air and electric equipment for North Halsted street bridge..... | 5,379 00 |
| 1 Contract for machinery and locks for North Halsted street bridge | 12,956 00 |
| 1 Contract for paving south approach to Rush street bridge | 1,346 74 |
| 1 Contract for repairing east approach to Washington street bridge | 135 00 |
| 1 Contract for repairing Fifth avenue approach to Twelfth street viaduct | 310 00 |
| 1 Contract for repairing south approach (Clark street) to Twelfth street viaduct..... | 270 00 |
| 1 Contract for repairing Fifth avenue viaduct..... | 1,475 00 |
| 1 Contract for planking roadway Milwaukee avenue viaduct | 1,180 59 |
| 1 Contract for cast-iron wheels for bridges..... | 2,644 08 |

| | |
|---|-------------|
| 1 Contract for repairing south approach to Rush street bridge | \$ 4,149 33 |
| 3 Contracts for furnishing cast-iron water pipe | 96,401 80 |
| 1 Contract for special castings for water pipe | 12,000 00 |
| 1 Contract for hydrant and stop-valve castings | 7,000 00 |
| 1 Contract for cast-iron rings and covers, hydrant chambers | 2,300 00 |
| 1 Contract for brass castings for hydrant and stop valves | 4,780 00 |
| 1 Contract for cast-iron manhole and catch-basin covers | 3,700 00 |
| 1 Contract for corporation ferrules | 5,372 24 |
| 8 Contracts for coal, for City Hall, bridges and pumping stations | 281,380 00 |
| 3 Contracts for oak and pine lumber for viaducts, bridges and City yards | 7,900 00 |
| 1 Contract for water tunnel and crib, Lake Michigan | 760,000 00 |
| 1 Contract for water tunnel at Sixty-eighth street ... | 90,000 00 |
| 1 Contract for building lake crib, Sixty-eighth street tunnel | 34,380 00 |
| 1 Contract for removing inner Hyde Park crib | 4,500 00 |
| 1 Contract for sewerage pumping station | 7,200 00 |
| 1 Contract for sewerage pumping engines | 6,945 00 |
| 1 Contract for repairing roof at Fourteenth street pumping station | 2,226 00 |
| 1 Contract for filling and grading Isolation Hospital grounds | 3,139 00 |
| 3 Contracts for electric machinery, dynamos, engines, etc., Isolation Hospital | 5,400 00 |
| 1 Contract for hot well and foundations, Kensington sewage pumping station | 595 00 |
| 1 Contract for bath-house building on Wentworth avenue | 8,400 00 |
| 1 Contract for iron work, painting, plumbing, gas fitting and steam heating for Wentworth avenue bath-house | 3,622 00 |
| 1 Contract for frame fire engine house, Ninety-fifth street and Cottage Grove avenue | 2,361 00 |
| 1 Contract for observation tower, lake front, Oak street | 800 00 |
| 1 Contract for constructing repair shop on Ashland avenue | 24,000 00 |

| | | |
|---|-----------------|---|
| 2 Contracts for structural and ornamental iron work and for sheet metal work for repair shops on Ashland avenue | \$ 5,704 00 | |
| 1 Contract for iron shelves and book-cases for water office | 590 00 | |
| 3 Contracts for cleaning and filling hydrant basins.. | 2,654 28 | |
| 1 Contract for cleaning and repairing artesian well, Irving Park..... | 2,046 00 | |
| 2 Contracts for sweeping and cleaning streets | 268,636 74 | ◀ |
| 5 Contracts for teaming for Water and Sewer Depart- ments | 61,860 00 | |
| 25 Contracts for removing garbage..... | 312,573 08 | |
| 2 Contracts for steam tug-boat service..... | 12,073 85 | |
| 1 Contract for removing dead animals..... | 37,500 00 | |
| 1 Contract for furnishing lamp posts..... | 10,398 00 | |
| 1 Contract for repairing asphalt pavements | 34,888 83 | |
| 118 Contracts for constructing sewers | 783,011 78 | |
| 195 Contracts for laying water mains under special assessments | 181,189 46 | |
| 43 Contracts for laying house drains | 26,454 13 | |
| 102 Contracts for laying water service pipes | 68,092 48 | |
| | <hr/> | |
| | \$ 5,251,254 86 | |

The following table shows the quantity of water furnished, the total revenue received, and the average amount per million gallons annually, from 1858 to 1896, inclusive :

| YEAR | Million Gallons Furnished | Revenue | Revenue per Million Gallons |
|-----------------------------|------------------------------|--------------|--------------------------------|
| 1858..... | 1,092 | \$102,178 85 | \$93 57 |
| 1859..... | 1,415 | 122,753 50 | 86 75 |
| 1860..... | 1,717 | 131,162 73 | 76 39 |
| 1861..... | 1,767 | 131,035 10 | 74 15 |
| 1862..... (15 months).... | 2,705 | 188,448 25 | 69 66 |
| 1863.. (9 months)..... | 2,336 | 192,246 39 | 82 29 |
| 1864..... | 2,523 | 224,902 57 | 89 14 |
| 1865..... | 2,778 | 253,114 49 | 91 11 |
| 1866..... | 3,169 | 302,017 59 | 95 30 |
| 1867..... | 4,232 | 338,929 28 | 80 08 |
| 1868..... | 5,375 | 420,686 94 | 78 26 |
| 1869..... | 6,801 | 476,968 24 | 70 13 |
| 1870..... | 7,945 | 539,180 19 | 67 86 |
| 1871..... | 8,423 | 445,834 64 | 52 93 |
| 1872..... | 10,051 | 544,465 90 | 54 17 |
| 1873..... | 11,723 | 708,804 32 | 60 46 |
| 1874..... | 13,903 | 705,926 64 | 50 77 |
| 1875..... (9 months)..... | 10,957 | 635,996 54 | 58 04 |
| 1876..... | 15,346 | 771,940 38 | 50 30 |
| 1877..... | 19,047 | 908,509 64 | 47 70 |
| 1878..... | 19,564 | 944,190 97 | 48 26 |
| 1879..... | 20,558 | 922,001 26 | 44 85 |
| 1880..... | 21,003 | 865,618 35 | 41 21 |
| 1881..... | 23,332 | 936,922 07 | 40 16 |
| 1882..... | 24,151 | 1,049,576 90 | 43 46 |
| 1883.. | 26,742 | 1,142,868 54 | 42 73 |
| 1884..... | 29,286 | 1,204,338 74 | 41 12 |
| 1885..... | 33,451 | 1,339,038 00 | 40 03 |
| 1886..... | 35,693 | 1,374,837 32 | 38 52 |
| 1887..... | 37,199 | 1,490,023 68 | 40 05 |
| 1888..... | 38,122 | 1,557,116 78 | 40 84 |
| 1889..... | 40,504 | 1,621,786 34 | 40 04 |
| 1890..... | 55,614 | 2,202,724 58 | 39 61 |
| 1891..... | 63,552 | 2,364,463 09 | 37 21 |
| 1892..... | 71,035 | 2,738,434 10 | 38 55 |
| 1893..... | 86,298 | 2,949,548 87 | 34 18 |
| 1894..... | 87,074 | 3,158,492 94 | 36 27 |
| 1895..... | 91,922 | 3,318,483 85 | 36 20 |
| 1896..... | 93,040 | 3,176,855 71 | 34 14 |

SEWERAGE.

During the past year the contract has been let for the West Forty-fifth street sewer system, and a greater part of it constructed, and will be finished early in the coming summer; when completed it will greatly relieve that part of the City west of North Forty-fifth street from Mud lake to Fullerton avenue.

The contract for the Indiana avenue low level sewer system has been let and completed to the pumping station, the pumping station has been erected and the engines and pumps put in with a capacity of 11,000,000 gallons per day; this system will be completed as soon as the weather will permit. When finished this system will drain the low land in that part of the City south of Ninety-ninth street to the Calumet river, between State street and the Illinois Central Railroad.

The six-foot sewer has been constructed in Montrose boulevard from the north branch of the Chicago river to Milwaukee avenue, and affords great relief to that part of the City north of Irving Park boulevard in times of flood.

The so-called Eighty-third street sewer system has been before the County Court, but confirmation has been delayed on account of an error made by the Court in appointing the assessment commissioners.

The sewerage system has been extended in the various divisions of the City during the year, as follows:

| | |
|--|--------------|
| Constructed in the West Division..... | 28,656 miles |
| Constructed in the South Division..... | 20,808 miles |
| Constructed in North Division | 7,955 miles |

| | |
|-------------|--------------|
| Total | 57,419 miles |
|-------------|--------------|

| | |
|-----------------------------------|-------|
| Number of catch-basins built..... | 2,201 |
| Number of manholes built..... | 1,990 |

The cost of constructing sewers and catch-basins during the year was as follows:

| | |
|---------------------|--------------|
| West Division..... | \$480,980 67 |
| South Division..... | 195,164 84 |
| North Division..... | 45,724 37 |
| | <hr/> |
| | \$721,869 88 |

| | |
|---|-----------|
| Total number of catch-basins..... | 43,583 |
| Total number of manholes | 48,154 |
| Total number of miles of sewer in the City..... | 1,305.857 |

MAINTENANCE OF SEWERS.

The cost of cleaning and repairing sewers, the cost per mile, and number of miles, also the number of catch-basins and manhole chambers distributed in the three divisions of the City, are as follows:

| DIVISION. | MILES OF SEWER. | NUMBER OF CATCH-BASINS. | NUMBER OF MANHOLE CHAMBERS. |
|-------------|--------------------|----------------------------|-----------------------------------|
| West..... | 558.478 | 20,125 | 19,812 |
| South..... | 508.088 | 17,507 | 19,083 |
| North | 239.291 | 8,152 | 9,259 |
| Totals..... | 1,305.857 | 45,784 | 48,154 |

The cost of repairing sewers during the year was \$46,281.84, being an average cost of \$35.44 per mile.

The cost of cleaning was \$96,901.65, making the average cost \$74.21 per mile.

The total cost of both repairs and cleaning was \$143,183.49, making an average of \$109.64 per mile.

Of the 57.419 miles of sewers constructed during the year, 19.133 miles are of brick and 38.265 miles of vitrified pipe.

Of the 1,305.857 miles of sewers constructed, 501.902 miles are of brick and 803.936 miles are of vitrified pipe.

TOTAL COST OF SEWERS.

| DIVISIONS. | MILES. | COST. | AVERAGE COST PER MILE. |
|-------------|-----------|-----------------|------------------------------|
| West | 558.478 | \$ 7,618,773 91 | \$11,851 45 |
| South | 508.088 | 7,121,830 92 | 14,010 69 |
| North | 239.291 | 2,920,949 71 | 12,206 68 |
| Totals..... | 1,305.857 | \$17,661,554 54 | \$13,522 49 |

STREET PAVING.

During the year 1896 streets were improved as follows :

| | |
|-------------------------------------|--------------|
| Paved with cedar blocks..... | 43.77 miles. |
| Paved with macadam..... | 13.60 miles. |
| Paved with granite blocks..... | 3.56 miles. |
| Paved with Medina stone..... | 0 miles. |
| Paved with brick..... | 4.71 miles. |
| Paved with asphalt..... | 17.01 miles. |
| Curbed and filled..... | 3.42 miles. |
| Total number of miles improved..... | 86.07 miles. |

DISTRIBUTION OF KINDS OF PAVEMENT.

The following table gives the mileage of each class of pavement in use in the three principal divisions of the City :

| DIVISION. | Cedar Block, Miles. | Macadam Miles. | Medina Stone, Miles. | Granite, Miles. | Sheet Asphalt, Miles. | Block Asphalt, Miles. | Brick, Miles. | Burned Clay, Miles. | Found'n, Miles. | Total Miles. |
|---------------|---------------------|----------------|----------------------|-----------------|-----------------------|-----------------------|---------------|---------------------|-----------------|--------------|
| North | 162.24 | 63.01 | 0.49 | 0.81 | 4.88 | ..... | 1.57 | ..... | 1.08 | 234.08 |
| South..... | 207.83 | 259.70 | 1.55 | 20.26 | 10.42 | 3.05 | 5.25 | ..... | ..... | 508.06 |
| West... .. | 382.61 | 21.60 | 0.39 | 4.20 | 30.64 | ..... | 2.06 | ..... | ..... | 441.50 |
| Totals | 752.68 | 344.31 | 2.43 | 25.27 | 45.94 | 3.05 | 8.88 | ..... | 1.08 | 1183.64 |

Repaving and repairs have been made on improved streets in each division of the City as follows :

| | |
|---------------------|----------------------|
| North Division..... | 55,735 square yards. |
| South Division..... | 98,853 square yards. |
| West Division..... | 78,559 square yards. |

*Total233,147 square yards.

*This does not include the repaving done by private corporations.

SIDEWALKS.

Number of miles of wood, stone and concrete sidewalks built during 1896 :

| DIVISION. | MATERIAL. | | | Total Miles. | Sidewalks Repaired, Miles. | Total Work, Miles. |
|-------------|--------------|---------------|------------------|--------------|----------------------------|--------------------|
| | Wood, Miles. | Stone, Miles. | Concrete, Miles. | | | |
| North..... | 28.02 | .58 | 27.75 | 56.35 | .18 | 56.53 |
| South..... | 68.90 | .65 | 28.72 | 98.27 | 1.07 | 99.34 |
| West | 53.92 | 1.80 | 26.26 | 81.98 | 1.83 | 83.81 |
| Totals..... | 150.84 | 3.03 | 82.73 | 236.60 | 3.08 | 239.68 |

Total number of miles of sidewalks under the control of the City and the South, West and Lincoln Park Commissioners, at the close of the year :

| CONTROLLED BY. | MATERIAL. | | | Total Miles. |
|---------------------------------|--------------|---------------|------------------|--------------|
| | Wood. Miles. | Stone. Miles. | Concrete. Miles. | |
| City | 3,900.14 | 233.53 | 609.73 | 4,743.40 |
| South Park Commissioners..... | | 20.00 | 30.74 | 50.74 |
| West Park Commissioners..... | | 11.05 | 51.04 | 62.09 |
| Lincoln Park Commissioners..... | | 2.17 | 4.70 | 6.87 |
| Total Miles..... | 3,900.14 | 266.75 | 696.21 | 4,863.10 |

PARKS.

The cost of maintaining the various parks under the control of this Department during the past year was as follows:

| | |
|----------------------------------|-------------|
| Aldine Square | \$ 1,102 41 |
| Douglas Monument Square..... | 1,000 00 |
| Ellis Park | 1,000 00 |
| Bickerdike Square | 424 87 |
| Jefferson Park (Jefferson) | 400 00 |
| Irving Park..... | 400 00 |
| East End Park..... | 488 45 |
| Green Bay Park..... | 600 00 |
| Oak Park..... | 833 23 |
| Washington Square..... | 1,205 56 |
| Holstein Park..... | 400 00 |
| Gross Park | 400 00 |
| Congress Park..... | 1,348 58 |
| Shedd's Park | 531 90 |
| Eldred Park | 400 00 |
| Lakewood Park..... | 230 00 |
| Norwood Park | 402 25 |
| De Kalb Square..... | 722 48 |
| Kedzie Park..... | 410 00 |
| Total..... | \$12,299 73 |

BUILDINGS ERECTED.

The report of the Commissioner of Buildings shows that during the year 6,444 buildings were erected, extending over an aggregate frontage of 158,846 feet, at a cost of \$22,730,625.00, the same being distributed in the divisions of the City as follows:

| DIVISION. | NUMBER BUILDINGS ERECTED. | AGGREGATE FRONTAGE IN FEET. | FRONTAGE IN MILES. | ESTIMATED VALUE. |
|-----------------|---------------------------------|-----------------------------------|-----------------------|---------------------|
| North Side..... | 1,319 | 33,879 | 6.41 | \$ 4,622,425 00 |
| South Side..... | 2,404 | 60,054 | 11.37 | 11,148,820 00 |
| West Side..... | 2,721 | 64,913 | 12.29 | 6,959,370 00 |
| Totals..... | 6,444 | 158,846 | 30.07 | \$22,730,615 00 |

COMPARISON WITH TEN PREVIOUS YEARS.

| YEAR. | NUMBER BUILDINGS ERECTED. | AGGREGATE FRONTAGE IN FEET. | FRONT- AGE IN MILES. | ESTIMATED VALUE. |
|--------------|---------------------------------|-----------------------------------|----------------------------|---------------------|
| 1885..... | 4,638 | 108,850 | 20.62 | \$19,624,100 00 |
| 1886..... | 4,664 | 112,302 | 21.27 | 21,324,400 00 |
| 1887..... | 4,833 | 115,506 | 21.88 | 19,778,100 00 |
| 1888..... | 4,958 | 116,419 | 22.05 | 20,360,800 00 |
| 1889..... | 4,931 | 119,573 | 22.65 | 25,065,500 00 |
| 1890..... | 11,608 | 266,284 | 50.43 | 47,322,100 00 |
| 1891..... | 11,805 | 282,672 | 53.54 | 54,201,800 00 |
| 1892..... | 13,194 | 327,573 | 62.04 | 64,740,800 00 |
| 1893..... | 8,359 | 216,893 | 41.07 | 28,708,750 00 |
| 1894..... | 9,855 | 232,487 | 44.03 | 33,863,570 00 |
| 1895..... | 8,633 | 218,360 | 41.36 | 35,010,043 00 |
| 1896..... | 6,444 | 158,846 | 30.07 | 22,730,615 00 |
| Totals | 93,922 | 2,275,765 | 431.01 | \$392,730,578 00 |

HOUSE MOVING.

Under the supervision of this Department, 855 buildings were moved, 703 being frame, 151 brick, and 1 iron.

The following table gives the number moved in the different sections of the City, the height, and the total frontage:

| NORTH SIDE. | SOUTH SIDE. | WEST SIDE. | TOTAL. |
|-------------|--------------|----------------|--------|
| 191 | 280 | 384 | 855 |
| ONE STORY. | TWO STORIES. | THREE STORIES. | |
| 407 | 411 | 37 | |

The total frontage was 17,868 feet, or about two and one-half miles.

ASSESSMENTS PREPARED.

| | |
|--|-------|
| Cedar block pavement..... | 176 |
| Asphalt pavement..... | 25 |
| Macadam pavement..... | 56 |
| Vitrified brick pavement..... | 16 |
| Granite pavement..... | 16 |
| Miscellaneous street and alley improvements..... | 64 |
| Openings and widenings..... | 23 |
| Water supply pipes..... | 242 |
| Water service pipes..... | 102 |
| Sewers..... | 165 |
| Private drains..... | 126 |
| Plank sidewalks..... | 299 |
| Cement sidewalks..... | 77 |
| Stone sidewalks..... | 2 |
| Gas lamp posts..... | 167 |
| Boulevard lamp posts..... | 23 |
| Electric lamp posts..... | 1 |
| Total..... | 1,580 |

MAPS AND PLATS MADE.

| | |
|--|-------|
| Electric lamp post assessments..... | 8 |
| Electric lamp post ordinances..... | 12 |
| Lamp post ordinances..... | 597 |
| Lamp post orders..... | 340 |
| Lamp post assessments..... | 159 |
| Street improvement assessments and street and alley opening assessments..... | 597 |
| Street and alley opening ordinances..... | 244 |
| Street Engineer's estimates..... | 518 |
| Surveys..... | 71 |
| Sidewalk assessments..... | 544 |
| Water pipe extension..... | 276 |
| Law Department..... | 1,525 |
| Miscellaneous purposes..... | 250 |
| Total number of maps and plats..... | 5,141 |

STREET LAMPS.

The following table shows the number of street lamps of each kind in use, and the number erected during the year:

| DIVISION. | GAS LAMPS. | | | | ELECTRIC LAMPS. | | | |
|--------------|---------------------------------|----------------------------|-------------------------------|----------------------------------|---------------------------------|----------------------------|-------------------------------|----------------------------------|
| | No. in City Jan. 1, 1896. | Erected during 1896. | Discontin- ued in 1896. | No. in City Dec. 31, 1896. | No. in City Jan. 1, 1896. | Erected during 1896. | Discontin- ued in 1896. | No. in City Dec. 31, 1896. |
| North | 7,126 | 380 | 326 | 7,180 | 237 | 3 | ... | 240 |
| South | 12,466 | 421 | 1,806 | 11,081 | 846 | 147 | 7 | 986 |
| West | 18,254 | 531 | 960 | 17,825 | 528 | 17 | ... | 545 |
| Totals | 37,846 | 1,332 | 3,092 | 36,086 | 1,611 | 167 | 7 | 1,771 |
| DIVISION. | GASOLINE LAMPS. | | | | OIL LAMPS. | | | |
| | No. in City Jan. 1, 1896. | Erected during 1896. | Discontin- ued in 1896. | No. in City Dec. 31, 1896. | No. in City Jan. 1, 1896. | Erected during 1896. | Discontin- ued in 1896. | No. in City Dec. 31, 1896. |
| North | 1,233 | 37 | 130 | 1,140 | ... | ... | ... | ... |
| South | 5,191 | 81 | 692 | 4,580 | 194 | 2 | ... | 196 |
| West | 4,885 | 230 | 577 | 4,538 | ... | ... | ... | ... |
| Totals | 11,309 | 348 | 1,399 | 10,258 | 194 | 2 | ... | 196 |

SCHEDULE I.

GAS BOULEVARD LAMPS.

| | | |
|---------------------|---------------|-------------------------------|
| North Division..... | 7,180 | |
| South Division..... | 11,081 | |
| West Division | 17,825 | |
| | <u>36,086</u> | @ \$20 00 each, \$ 721,720 00 |

GASOLINE OIL LAMPS.

| | | |
|---------------------|---------------|-----------------------------------|
| North Division.. .. | 1,140 | |
| South Division..... | 4,580 | |
| West Division..... | 4,538 | |
| | <u>10,258</u> | @ \$15 00 each, <u>153,870 00</u> |
| | | <u><u>\$875,590 00</u></u> |

EXPENSE OF LIGHTING.

The following table shows the cost of lighting the City and maintaining lamps, during the year ending December 31, 1896, including the cost of extinguishing, under schedule adopted by the Council :

| | |
|---|----------------|
| Total cost of lighting and maintaining gas lamps | \$ 732,900 13 |
| For material for and lighting of oil lamps and | } 158,699 10 |
| For gasoline used by the City for maintaining lamps.. | |
| For maintaining electric lamps—City plants..... | 109,901 24 |
| For lighting electric lamps by contract..... | 56,996 41 |
| Total cost of lighting the City | \$1,058,496 88 |

ELECTRIC LIGHTING.

The following table shows the annual extension of the Municipal Electric Light System from December 24th, 1887, to December 31st, 1896, inclusive:

| YEAR. | Number of Power Houses Erected. | Estimated Capacity of Power Houses in 2,000-Candle Power Lights. | Horse Power of Engines installed. | Number of Arc Lights Placed in Operation. | Number of Arc Lights Displacing Gas Lights. | Number of Gas Lights Displaced. | Average Number of Gas Lights Displaced by each Electric Light. |
|------------|---------------------------------|--|-----------------------------------|---|---|---------------------------------|--|
| 1887..... | * 1 | † 125 | 125 | 105 | 76 | ... | ... |
| 1888... .. | * 1 | † 300 | 300 | 192 | 192 | 826 | 4 $\frac{3}{10}$ |
| 1889..... | ¶ 3 | 3,000 | 1,500 | 372 | 372 | 1,452 | 3 $\frac{9}{10}$ |
| 1890..... | 1 | 850 | 425 | 260 | 260 | 1,343 | 5 $\frac{1}{10}$ |
| 1891..... | | | | 64 | 58 | 273 | 4 $\frac{7}{10}$ |
| 1892..... | | | | 109 | 88 | 341 | 3 $\frac{9}{10}$ |
| 1893..... | | | | 10 | 10 | 40 | 4 |
| 1894..... | | 1,000 | 1,000 | ‡ 4 | ... | ... | ... |
| 1895..... | | | | 8 | 1 | 1 | ... |
| 1896..... | | | | 138 | 91 | § 364 | 4 |
| Total..... | 4 | 3,850 | 2,300 | 1,254 | 1,148 | 4,640 | 4 |

* Abandoned. † Moved to Plant No. 1. ‡ Decrease. § 23 Gasoline.

¶ The Throop street plant, with capacity for one thousand 2,000-candle power arc lamps and 625-horse power engines, together with the buildings and real estate upon which they were located, was sold to the Metropolitan West Side Elevated Railroad Company, in December, 1893, for \$95,000.00, and real estate upon which to erect and equip a new power station.

This latter was erected at 299 to 301 South Halsted street and fully equipped in 1894 and 1895, with capacity for one thousand 2,000-candle power arc lights and 1,000-horse power engines. The plant was placed in operation October 9th, 1895.

To our electric lighting system we have added during the year 1896 one hundred and forty-two 2,000-candle power arc lamps and have discontinued four, making a net addition of 138, or 1,254 in service December 31, 1896.

To accomplish this we have added nine manholes, 19,068 feet of steel pipe, and 67,095 feet of single conductor electric light wire and cable.

We have added one 125-light dynamo at our Fourteenth street plant, as most of the new lights put in were in the First Ward, where there are now no gas or gasoline lamps.

In the more prominent localities where new lights have been placed we have erected ornamental iron posts to the number of eighty-eight.

We have placed one hundred 16-candle power Edison incandescent lamps in our plant at 299-301 South Halsted street, for use of that power station before arc lights are started and after shutting down in the early morning.

We have made connections in our Halsted street plant so that the same is entirely heated by steam during the cold season, and have also placed oiling systems on our engines therein, which work automatically and save the expense of one oiler.

The total amount expended for construction during the year was \$31,676.32.

The following table shows the number of lights operated from City power stations and rented from private companies, January 1, 1896, together with the number added and discontinued during the year:

| SIDE. | CITY POWER STATION. | | | | RENTED LAMPS. | | | | TOTAL. |
|-------------|---------------------|----------------|-------------------|--------|-------------------|----------------|-------------------|--------|--------|
| | Dec. 31, 1895. | Added 1896. | Left off 1896. | Total. | Dec. 31, 1895. | Added 1896. | Left off 1896. | Total. | |
| North | 237 | 3 | ..... | 240 | ..... | ..... | ..... | ..... | 240 |
| South | 351 | 122 | 4 | 469 | 495 | 25 | 3 | 517 | 986 |
| West | 528 | 17 | ..... | 545 | ..... | ..... | ..... | ..... | 545 |
| | 1,116 | 142 | 4 | 1254 | 495 | 25 | 3 | 517 | 1,771 |

THE CITY ELECTRIC LIGHT SYSTEM COMPRISES :

| | |
|--|---------|
| Power stations..... | 4 |
| 125-horse power high speed engines..... | 9 |
| 300-horse power Corliss engines..... | 1 |
| 500-horse power vertical compound condensing engines..... | 2 |
| 100-horse power tubular boilers, heaters, pumps, etc..... | 6 |
| 125-horse power tubular boilers, heaters, pumps, etc..... | 8 |
| 500-horse power tubular boilers, heaters, pumps, etc..... | 3 |
| 2,000-candle power single carbon and double carbon arc lamps | 1,382 |
| Incandescent arc lamps..... | 6 |
| Incandescent lamps..... | 100 |
| 125-light high tension dynamos..... | 1 |
| 100-light high tension dynamos..... | 8 |
| 60-light high tension dynamos..... | 8 |
| 50-light high tension dynamos..... | 8 |
| 35-light high tension dynamos..... | 8 |
| Lamp posts..... | 1,131 |
| Lamp hoods..... | 1,165 |
| Miles of electric light cable..... | 200 |
| Number of feet of underground conduit..... | 12,580 |
| Number of feet iron pipe laid underground..... | 610,252 |
| Number of manholes..... | 372 |
| Number of handholes..... | 109 |

Current is supplied for maintaining and operating twelve hundred and fifty-four 2,000-candle power arc lamps from three of the power stations, located at Fourteenth street and Indiana avenue, Chicago avenue and Sedgwick street, and No. 299-301 S. Halsted street. The station at Rice and Lincoln streets is now used for repair shops of the City Telegraph, Electric Light, Gas and Gasoline Bureaus.

All of the above lights burn all night, from dusk to daylight, every night in the year.

The City rents five hundred and seventeen 2,000-candle power arc lamps from private companies, which are required to burn the same length of time as City lamps. The total cost for the year was \$56,996.41.

The average number of lamps maintained and operated from the City power stations in 1896 was 1,140, and the following table shows the cost in detail of labor and material therefor, together with the average cost per lamp, for each and for both, during the year:

| LABOR. | 1,140 LAMPS. | PER LAMP. |
|---|--------------|-----------|
| Engineers and Assistant Engineers..... | \$10,844 64 | \$9 51 |
| Dynamo tenders | 5,400 00 | 4 74 |
| Lamp trimmers | 14,493 89 | 12 71 |
| Firemen..... | 17,684 25 | 15 51 |
| Labor for Repair Shop..... | 6,093 45 | 5 35 |
| All other labor..... | 4,118 60 | 3 61 |
| Total | \$58,634 83 | \$51 43 |
| MATERIAL. | | |
| Coal | \$26,262 00 | \$23 04 |
| Carbons..... | 5,807 06 | 5 10 |
| Globes | 503 77 | 44 |
| Engine and cylinder oil..... | 1,664 10 | 1 46 |
| Rags and waste..... | 291 08 | 26 |
| Repairing boilers and boiler compound.. | 1,934 03 | 1 70 |
| Repairing engines and steam pipes | 1,838 14 | 1 61 |
| Repairing dynamos..... | 990 52 | 87 |
| Repairing cables, conduits, etc..... | 3,424 00 | 3 00 |
| Material for Repair Shop..... | 2,996 79 | 2 62 |
| Rental of real estate | 2,500 00 | 2 19 |
| Other repairs and expenses | 3,054 92 | 2 68 |
| Total | \$ 51,266 41 | \$44 97 |
| Total for Labor and Material..... | \$109,901 24 | \$96 40 |

SUMMARY OF ELECTRICAL INSPECTION.

MOTORS INSPECTED.

| YEAR. | NUMBER. | CAPACITY AND HORSE-POWER. |
|------------------------|---------|---------------------------|
| Previous to 1892 | 668 | 2,004 |
| 1892 | 504 | 1,492 |
| 1893 | 601 | 1,881 |
| 1894 | 568 | 1,128 |
| 1895 | 558 | 1,319 |
| 1896 | 711 | 3,578 |
| Totals..... | 3,610 | 11,402 |

| | |
|---|-----|
| Completed inspections of wiring only during 1896..... | 587 |
| Certificates issued for wiring only during 1896..... | 296 |

Isolated plants reinspected during 1896, as follows:

| ARC LAMPS. | INCANDESCENT LAMPS. | MOTORS. | | GENERATORS. | |
|------------|---------------------|---------|--------------|-------------|--------------|
| | | Number. | Horse Power. | Number. | Horse Power. |
| 410 | 9,774 | 38 | 61 | 42 | 989 |

Isolated plants in process of reinspection, 195.

| | |
|---|-----|
| Isolated plants previous to 1896..... | 611 |
| New installations during 1896..... | 74 |
| | 685 |
| Removals during 1896..... | 16 |
| | 669 |
| Total number isolated plants Dec. 31, 1896..... | 669 |

Statement of yearly inspection of electric light lamps from February 14, 1884, up to and including December 31, 1896:

| YEAR. | NUMBER OF ARC LAMPS. | NUMBER OF INCAN- DESCENT LAMPS. |
|-------------|-------------------------|------------------------------------|
| 1884 | 1,148 | 1,885 |
| 1885 | 392 | 7,609 |
| 1886 | 479 | 5,225 |
| 1887 | 837 | 5,424 |
| 1888 | 2,369 | 17,717 |
| 1889 | 2,623 | 24,966 |
| 1890 | 2,682 | 39,543 |
| 1891 | 3,974 | 87,913 |
| 1892 | 5,046 | 101,668 |
| 1893 | 6,279 | 150,545 |
| 1894 | 3,604 | 67,593 |
| 1895 | 3,228 | 53,090 |
| 1896 | 4,739 | 80,251 |
| Totals..... | 37,400 | 643,429 |

FINANCIAL.

Statement of the sum appropriated by the Common Council, together with various amounts from other sources, to be expended in public improvements under the supervision of the Department of Public Works, during the year 1896:

| | |
|--|------------|
| Balance January 1, 1896, to the credit of Water Fund, \$ | 133,299 83 |
| Balance January 1, 1896, to the credit of Appropriation Fund | 30,938 17 |

RECEIPTS.

| | |
|--|-----------------|
| From appropriation for 1896..... | \$ 1,780,557 93 |
| From rent of Rookery lot | 35,000 04 |
| From water revenue, including meter and private work and tapping permits | 3,247,274 84 |
| From advances to lay water mains | 78,983 93 |
| From hydrant wrenches | 1,410 00 |
| From sale of water certificates..... | 166,962 50 |

| | |
|---|------------------------|
| From drain permits and drain licenses..... | \$ 31,794 19 |
| From house-moving permits..... | 1,682 00 |
| From deposits for street permits (work done)..... | 51,559 74 |
| From special assessment sewer inspection and work.. | 110,139 71 |
| From deposits for sundry improvements, special assessments and other funds..... | 593,709 99 |
| From special assessment collections..... | 3,351,759 80 |
| Total | <u>\$ 9,615,072 67</u> |

EXPENDITURES.

| | |
|--|-----------------|
| For bridges and viaduct repairs, street cleaning and removal of garbage, repairing improved and unimproved streets, public buildings and parks, Fullerton avenue and Canal pumping stations, improved street intersections, sewer catch-basins, labor, material and salaries | \$ 2,271,084 05 |
|--|-----------------|

CONSTRUCTION.

| | |
|---|---------------------|
| For Small-pox Hospital | \$ 90,080 03 |
| For North Halsted street bridge..... | 111,897 40 |
| For Stock Yards viaduct..... | 84,573 72 |
| For Diversey street bridge..... | 31,246 73 |
| For new bath house..... | 6,550 22 |
| | <u>324,348 10</u> |
| For extension water pipe system | \$ 416,394 00 |
| For water pipe and special castings | 106,120 98 |
| For Lake View water tunnel..... | 86,216 95 |
| For Sixty-eighth street tunnel | 59,775 15 |
| For new land tunnel, 1895..... | 424,888 54 |
| For Western avenue tunnel | 1,872 84 |
| For Northeast lake tunnel..... | 238,988 77 |
| For Two-mile crib | 240 02 |
| For Sixty-eighth street crib..... | 42,149 23 |
| Southwest pumping station..... | 11,533 40 |
| New repair shops | 47,175 25 |
| | <u>1,435,355 13</u> |

| | |
|--|-----------------|
| For maintenance of water system, operating pumping stations, cost of assessing and collecting water taxes, stock on hand, etc..... | \$ 1,174,793 74 |
| For water certificates | 363,462 50 |
| For Hyde Park bonds | 9,000 00 |
| For Town of Lake bonds..... | 15,000 00 |
| For interest on bonds and certificates..... | 261,305 23 |
| For advance for laying water pipe refunded..... | 83,573 82 |
| For street improvements, street openings, sidewalks, sewers, private drains, water service pipes and lamp posts..... | 3,351,759 80 |
| Total | \$ 9,289,682 37 |

| | |
|---|---------------|
| Balance to credit Water Fund, January 1, 1897..... | 325,382 96 |
| Balance to credit Special Fund, W., January 1, 1897.. | 7 34 |
| Total | \$ 325,390 30 |

WATER WORKS RECEIPTS AND EXPENDITURES, 1896..

| | |
|---------------------------------------|---------------|
| Credit balance, January 1, 1896 | \$ 133,299 83 |
|---------------------------------------|---------------|

RECEIPTS.

| | |
|--|------------------------|
| Water rate collections (including delinquents) | \$ 3,128,893 55 |
| Water permits (permits and plumbers' licenses, etc.).. | 27,151 58 |
| Water meter, labor, etc., for private parties | 91,229 71 |
| Rent for Rookery lot..... | 35,000 04 |
| Advance to lay water pipes..... | 78,983 93 |
| From sale of water certificates..... | 166,962 50 |
| Hydrant wrenches | 1,410 00 |
| Old material sold, etc | 4,942 24 |
| | <u>\$ 3,667,873 38</u> |

EXPENDITURES.

| | |
|---|-----------------|
| For water pipe extension..... | \$ 416,394 00 |
| For water pipes and special castings | 106,120 98 |
| For Water Works repairs..... | 243,570 92 |
| For new land tunnel, 1895..... | 424,888 54 |
| For Northeast lake tunnel, 1895 | 238,988 77 |
| For Western avenue tunnel..... | 1,872 84 |
| For Sixty-eighth street tunnel extension..... | 59,775 15 |
| For Lake View tunnel | 86,216 95 |
| For meter and private works..... | 77,635 18 |
| For water permits | 30,052 75 |
| For North pumping station..... | 143,660 72 |
| For West pumping station..... | 77,610 67 |
| For South pumping station..... | 84,576 97 |
| For Central pumping station | 48,807 16 |
| For Sixty-eighth street pumping station..... | 75,308 07 |
| For Lake View pumping station..... | 57,236 11 |
| For Washington Heights pumping station..... | 5,796 14 |
| For Norwood Park pumping station..... | 2,244 17 |
| For Northwest pumping station | 76 30 |
| For Southwest pumping station | 11,533 40 |
| For Two-mile crib | 11,810 05 |
| For Four-mile crib..... | 8,981 75 |
| For Lake View crib..... | 9,119 33 |
| For Sixty-eighth street crib | 42,149 23 |
| For Water Office salary | 206,242 15 |
| For Water Office expense..... | 13,647 57 |
| For water proportional, office salary..... | 28,212 94 |
| For water proportional, office expense..... | 13,948 16 |
| For advance for laying water mains, refunded | 83,573 82 |
| For hydrant wrench deposits, refunded..... | 1,235 00 |
| For miscellaneous items..... | 25,838 98 |
| For new repair shops..... | 47,175 25 |
| For refund vouchers | 9,422 67 |
| For water certificates | 363,462 50 |
| For Hyde Park water loan bonds..... | 9,000 00 |
| For Town of Lake water loan bonds..... | 15,000 00 |
| For water loan interest..... | 261,305 23 |
| Total | \$ 3,342,490 42 |
| Balance to credit of the Water Fund, January 1, 1897, | 325,382 96 |
| Total | \$ 3,667,873 38 |

Total cost of Water Works of the City to December 31, 1896, is as follows :

Cost, up to May 1, 1861, when the Works were transferred from the Board of Commissioners to Board of Public Works \$ 1,020,160 21

EXPENDITURES SINCE 1861.

| | |
|--|------------------------|
| Cost of water pipe including labor | 13,499,074 55 |
| Cost of North pumping works..... | 929,532 44 |
| Cost of West pumping works..... | 944,217 77 |
| Cost of Sixty-eighth street pumping works..... | 284,366 60 |
| Cost of Central pumping works | 372,227 77 |
| Cost of Washington Heights pumping works | 10,246 96 |
| Cost of Lake View pumping works | 145,243 82 |
| Cost of South pumping works..... | 569,272 84 |
| Cost of new lake tunnel | 1,104,744 12 |
| Cost of Lake View tunnel | 701,792 45 |
| Cost of new lake shore inlet | 132,345 34 |
| Cost of new lake shore inlet extension | 146,459 04 |
| Cost of new lake shore inlet extension | 21,093 09 |
| Cost of North breakwater crib | 41,780 11 |
| Cost of Two-mile crib | 102,984 43 |
| Cost of Four-mile crib | 467,927 83 |
| Cost of Lake View crib..... | 88,051 62 |
| Cost of Sixty-eighth street crib | 42,149 23 |
| Cost of Sixty-eighth street tunnel extension..... | 614,992 95 |
| Cost of Ashland avenue tunnel | 17,453 36 |
| Cost of first lake tunnel | 464,866 05 |
| Cost of Second lake tunnel..... | 415,709 36 |
| Cost of lake crib protection | 149,431 63 |
| Cost of land tunnel to West pumping works..... | 542,912 63 |
| Cost of new land tunnel | 284,380 04 |
| Cost of Water Works shop..... | 27,240 58 |
| Cost of Water Works stock | 29,318 00 |
| Cost of Northeast lake tunnel, 1895 | 238,988 77 |
| Cost of Water Reservoir fence | 1,702 87 |
| Cost of addition to Stables | 1,019 48 |
| Cost of real estate for sites of pumping stations, etc.. | 242,285 75 |
| Cost of works, annexed territory | 1,160,164 24 |
| Cost of Jefferson street tunnel | 15,968 17 |
| Cost of new land tunnel, 1895 | 486,463 79 |
| Cost of Western avenue tunnel | 29,252 07 |
| Cost of new repair shops | 23,395 25 |
| Total cost of entire works to December 31, 1896.. | <u>\$25,369,215 21</u> |

Paid as follows :

| | | |
|---|---------------------|-----------|
| From general taxes..... | \$ 2,713,878 | 53 |
| From City of Chicago Water Loan bonds, 6 per cent.. | 132,000 | 00 |
| From City of Chicago Water Loan bonds, 4 per cent.. | 1,485,000 | 00 |
| From City of Chicago Water Loan bonds, 4 per cent.. | 1,706,500 | 00 |
| From City of Chicago Water Loan bonds, 3 $\frac{6}{10}$ per cent. | 332,000 | 00 |
| From City of Chicago Water Loan Bonds, 3 $\frac{1}{2}$ per cent. | 333,500 | 00 |
| From bonds canceled | 1,952,500 | 00 |
| From Hyde Park Water Loan bonds, 5 per cent..... | 50,000 | 00 |
| From Town of Lake Water Loan bonds, 5 per cent ... | 90,000 | 00 |
| From Lake View Water Loan bonds, 4 per cent | 50,000 | 00 |
| From Lake View Water Loan bonds, 5 per cent | 23,000 | 00 |
| From water certificates..... | 1,500 | 00 |
| From water earnings..... | 16,499,336 | 68 |
| Total..... | <u>\$25,369,215</u> | <u>21</u> |

| | | |
|--|---------------------|-----------|
| Total Water Works income to December 31, 1896..... | \$42,119,464 | 95 |
| Total operating expenses and maintenance to December 31, 1896 (including \$7,926,764.15 interest on bonded debt and bonds and certificates canceled) . | 25,556,625 | 85 |
| Difference between income and expenses..... | <u>\$16,562,839</u> | <u>10</u> |

Accounted for as follows :

| | | |
|--|---------------------|-----------|
| Paid toward Water Works construction. | \$16,499,336 | 68 |
| J. W. Lyons, cashier water office..... | 2,000 | 00 |
| Meter Department, stock on hand | 6,748 | 32 |
| Water Works Shop, stock on hand..... | 13,202 | 89 |
| Tapping Department, stock on hand... | 4,015 | 90 |
| Water pipe, etc., stock on hand | 141,999 | 95 |
| Balance to credit of Water Fund, Jan. 1, 1897 | 325,382 | 96 |
| | <u>\$16,992,686</u> | <u>70</u> |
| Less amount due depositors for hydrant wrenches..... | \$ 2,346 | 82 |
| Less amount advanced by private parties to lay water-pipe in non-paying districts..... | 427,500 | 78 |
| | <u>429,847</u> | <u>60</u> |
| | <u>\$16,562,839</u> | <u>10</u> |

BONDED DEBT OF WATER WORKS:

City of Chicago Water Loan bonds outstanding Dec. 31, 1896, bearing 4 per cent. interest and maturing as follows :

| | | |
|-------------------|---------------|-----------------|
| July 1, 1908..... | \$ 150,000 00 | |
| July 1, 1910..... | 159,500 00 | |
| July 1, 1912..... | 821,000 00 | |
| July 1, 1914..... | 576,000 00 | |
| July 1, 1915..... | 1,485,000 00 | |
| | | \$ 3,191,500 00 |

Bearing 3½ per cent. interest, maturing—

| | | |
|-------------------|---------------|------------|
| July 1, 1909..... | \$ 225,000 00 | |
| July 1, 1910..... | 108,500 00 | |
| | | 333,500 00 |

Bearing 3⁶/₁₀₀ per cent. interest, maturing—

| | | |
|-------------------|---------------|------------|
| July 1, 1902..... | \$ 332,000 00 | |
| | | 332,000 00 |

Bearing 6 per cent interest, maturing—

| | | |
|-------------------|--------------|------------|
| July 1, 1897..... | \$ 50,000 00 | |
| July 2, 1898..... | 82,000 00 | |
| | | 132,000 00 |

ANNEXED DISTRICTS.

Town of Lake bonds :

| | | |
|--|--------------|-----------|
| 5 per cent. bonds, due April 1, 1897.... | \$ 15,000 00 | |
| 5 per cent. bonds, due April 1, 1898.... | 15,000 00 | |
| 5 per cent. bonds, due April 1, 1899.... | 15,000 00 | |
| 5 per cent. bonds, due April 1, 1900.... | 15,000 00 | |
| 5 per cent. bonds, due April 1, 1901.... | 15,000 00 | |
| 5 per cent. bonds, due April 1, 1902.... | 15,000 00 | |
| | | 90,000 00 |

Hyde Park Bonds :

| | | |
|--|-----------|-----------|
| 5 per cent. bonds, due January 1, 1904. \$ | 50,000 00 | |
| | | 50,000 00 |

Lake View Water bonds :

| | | |
|--|--------------|-----------|
| 5 per cent. bonds, due July 1, 1904..... | \$ 23,000 00 | |
| 4 per cent. bonds, due July 1, 1907..... | 50,000 00 | |
| | | 73,000 00 |

Total bonded debt of Water Works..... \$ 4,202,000 00

Total interest paid on Water Loan to Jan. 1, 1897.... \$ 7,926,764 15

Floating indebtedness Water Loan certificates outstanding, 5 per cent. water certificates..... \$ 1,500 00

Comparative statement of the pay rolls of the 21 months of the present administration, from April 1st, 1895, to December 31st, 1896, with the previous 21 months from July 1st, 1893, to March 31st, 1895:

| | 21 mos. 1893-4-5. | 21 mos. 1895-6. | Decrease. |
|--|-----------------------|-----------------------|-----------------------|
| Water Pipe Extension | \$1,114,649 44 | \$ 718,326 81 | \$ 396,322 63 |
| Repairing Imp. and Unimp. Streets. | 774,339 53 | 622,848 37 | 151,491 16 |
| Sewerage Department | 637,202 08 | 468,212 20 | 168,989 88 |
| Pumping Stations | 484,320 02 | 430,207 27 | 54,112 75 |
| Bridge Repairs | 160,170 57 | 98,161 79 | 62,008 78 |
| City Pipe Yards | 135,474 62 | 112,292 36 | 23,182 24 |
| Special Assessment Office | 97,913 64 | 86,916 68 | 10,996 96 |
| Street Lamp Repairs | 59,597 58 | 52,437 32 | 7,160 26 |
| Map Department | 30,668 51 | 26,780 57 | 3,887 94 |
| City Engineer's Office | 45,356 96 | 41,483 24 | 3,873 72 |
| Commissioner's Office Salaries | 49,056 88 | 47,529 95 | 1,526 93 |
| Street Department Office Salaries... | 26,872 42 | 26,491 27 | 381 15 |
| Water Office Salaries | 372,885 73 | 372,033 65 | 852 08 |
| Street Cleaning Pay Roll | 327,487 30 | 133,674 25 | 193,813 05 |
| | | | Increase. |
| Water Works Shop | 81,993 70 | 90,742 37 | 8,748 67 |
| | <u>\$4,397,988 98</u> | <u>\$3,328,138 10</u> | <u>\$1,078,599 53</u> |
| Less increase in Water Works Shops | | | 8,748 67 |
| Total decrease | | | <u>\$1,069,850 86</u> |

Comparative statement of the expenses of the Street and Alley Cleaning Bureau for the 21 months of the present administration, from April 1st, 1895, to December 31st, 1896, with the previous 21 months, from July 1st, 1893, to March 31st, 1895:

| | 21 mos. 1893-4-5. | 21 mos. 1895-6. | Decrease. |
|------------------------------------|-----------------------|-----------------------|---------------------|
| Removal of garbage, etc. | \$1,038,680 83 | \$716,883 28 | \$321,797 55 |
| | 10,924 miles. | 21,292 miles. | Increase. |
| Street cleaning, by contract | 191,006 73 | 289,935 67 | 98,928 94 |
| | | | Decrease. |
| Street cleaning, by Bureau | 327,487 30 | 133,674 25 | 193,813 05 |
| | <u>\$1,557,174 86</u> | <u>\$1,140,493 20</u> | <u>\$416,681 66</u> |
| Decrease | | | \$416,681 66 |

TRACK ELEVATION.

Considerable progress has been made during the past year in extending the system of track elevation as shown in detail by the report of the City Engineer. The following is a condensed statement of the work performed :

The Lake Shore & Michigan Southern and the Chicago, Rock Island & Pacific Railway companies jointly began elevating on an ordinance passed March 9, 1894, on territory south of Forty-fifth street, and extending to Fifty-ninth street; constructing sub-ways at Forty-seventh street, Fifty-first street, Fifty-third street, Fifty-fifth street boulevard, Fifty-seventh street, Cloud court and Fifty-ninth street, elevating six tracks.

The Chicago & North-Western Railway worked upon an ordinance passed March 9, 1896, covering track elevation of four and two-tenths miles on the Milwaukee Division, from Clybourn Junction to Rosehill, and four and five-tenths miles on the Wisconsin Division, from Clybourn Junction to Mayfair.

On the Milwaukee Division the Chicago & North-Western Railway elevated three tracks and their yard at Diversey avenue, covering a territory of about two and one-half miles from Diversey avenue to Berteau avenue, where there were constructed thirteen sub-ways in forty-five working days, this being the quickest work done thus far in track elevation in this City. There remains a distance of about one and three-quarters miles to be elevated and six more sub-ways to be constructed to complete the work on this division of the Chicago & North-Western Railway, in accordance with ordinance.

CONCLUSION.

Through the courtesy of His Honor, Mayor Swift, I was appointed Commissioner of Public Works of Chicago, and entered reluctantly in the service of this City July 20th, 1896.

In taking upon myself duties so arduous and responsible, I had no personal interest to serve, nor ambition to gratify other than to do my whole duty, devoting my best energy and ability to the advancement of the City's interests, and to aid and encourage the promotion of all enterprises which would contribute to the betterment of the condition of her citizens. Five months of public service as Commissioner of Public Works have impressed me with the unprecedented growth of the City, and the wonderful development of her charitable and educational institutions, and the expansion of her commercial,

mercantile and manufacturing enterprises. With these evidences of substantial progress, it is reasonable to predict for her a conspicuous place among the first cities of the world, and such a future should inspire in all a pride and ambition to extend as far as possible a class of city improvements which would be the best of its kind and an honor to her present and future greatness.

To His Honor, George B. Swift, Mayor, I am indebted for valuable counsel and advice in all important public transactions pertaining to my Department. By his zeal in securing valuable legislation, and co-operating with this Department in the promotion and fulfillment of such enterprises, he has contributed much to the successful management of this branch of the City government, and has shown an honorable devotion in all matters tending to promote the general welfare and advancement of our citizens.

To the Honorable Members of the City Council I extend my sincere thanks for courtesies in all business and personal relations, and for such legislation as will promote through this Department the happiness and welfare of the citizens of Chicago. I desire to commend the heads of the various bureaus for the skill and energy with which they have performed the responsible duties of their respective offices, and to acknowledge my indebtedness for their honorable and faithful co-operation in attaining so successful a management of the business of the Department.

In closing, permit me to express my appreciation of the successful efforts of the Civil Service Commission in securing for this Department the services of those who through competitive examination have demonstrated a superior grade of efficiency and stability, thereby establishing a higher standard of public service in all branches of this Department.

JOSEPH DOWNEY,

Commissioner of Public Works.

REPORT OF THE
Bureau of Engineering
CITY OF CHICAGO

CITY ENGINEER'S REPORT.

HON. JOSEPH DOWNEY,

Commissioner of Public Works.

DEAR SIR—I have the honor to submit herewith the annual report of the Bureau of Engineering for the year ending December 31, 1896.

The subject matter is treated under the following headings, viz:

1. Water Supply System and Auxiliary Stations.
2. Tunnel and Crib Construction.
3. Water Pipe Extension.
4. Bridge and Viaduct Construction.
5. Bridge and Viaduct Maintenance.
6. Harbor.
7. Track Elevation.
8. Architecture.

During the year, 93,040,314,218 gallons of potable water have been pumped into the City mains by all the pumping stations combined, Norwood Park station included, or an average of 254,208,509 gallons per twenty-four hours, which is an increase over 1895 of 2,368,693 gallons per day. Assuming the population of the City at 2,000,000 this consumption is at the rate of 127.1 gallons per capita per day.

The total pumpage in 1894 was 87,073,943,249 gallons; in 1895, 91,921,532,749 gallons; and in 1896, 93,040,314,218 gallons; or an increase in 1896 over 1894 of 5,966,370,869 gallons, and over 1895 of 1,118,781,469 gallons.

The total cost of operation and maintenance in 1896, omitting the cost at the Norwood Park station, was \$468,684.24 as against \$565,760.85 in 1894 and \$535,630.63 in 1895; or a decrease in cost in 1896 of \$97,076.61 compared with 1894 and \$66,946.39 compared with 1895.

The City is drawing its water from Lake Michigan through tunnels, with the exception of the small station at Norwood Park, which is supplied by an artesian well. Washington Heights station is supplied with lake as well as artesian well water.

We have laid during the year 432,602 lineal feet of water mains, as against 350,405 lineal feet in 1895 or an increase in 1896 of 82,197 feet. The total cost for this work in 1896 was \$775,433.32 as against \$1,016,306.78 in 1895, or a decrease in 1896 of \$240,973.46.

Owing to numerous complaints on account of shortage of water in various districts of the City and in order to utilize the available surplus capacity of our tunnels, I respectfully recommend that two new fifteen million-gallon pumping engines be purchased to replace the old ones, known as the '53 and '57 Engines at the North pumping station; also one new fifteen million-gallon pumping engine to take the place of the two Cope-Maxwell engines at the Sixty-eighth street station. A new thirty million-gallon engine should also be purchased for the Fourteenth street station, where foundations for a fourth engine are already in place. It should be noted in connection herewith that the daily consumption of water per capita has decreased from 146 gallons in 1895 to 127.1 gallons in 1896.

I desire to call your attention to a number of bridges and viaducts which should be renewed and which are noted under the head of Bridge and Viaduct Construction.

WATER SUPPLY SYSTEM.

WATER TUNNELS (IN OPERATION).

LAKE VIEW TUNNEL.

This tunnel, which extends from the Lake View Water Works at Halsted street and Montrose boulevard, to a crib located 10,000 feet from shore, was commenced in 1889, but not completed until 1896. The shore heading, constructed from the shore shaft, partly in rock and partly in earth, had been finished a distance of some six thousand feet by the summer of 1892. This portion of the tunnel was immediately utilized by the sinking of a temporary intake crib over the lake end of the tunnel. The east four thousand feet of

tunnel is constructed on a lower level, through solid limestone rock. The tunnel has an internal diameter of six feet, and the total length is 10,000 feet. Water was let in at the outer crib in July, 1896.

CHICAGO AVENUE TUNNELS.

There are three tunnels connecting the Chicago avenue pumping station with the old two-mile crib, located in a northeasterly direction from the pumping station, viz.: one five-foot tunnel and two seven-foot tunnels, one of which continues in a southwesterly direction under the City, to the West Side pumping station, located on Ashland avenue, near Twenty-second street.

The five-foot tunnel, which is the first tunnel constructed for the purpose of water supply, was commenced March 17, 1864. The formal celebration of the completion of this tunnel, and the introduction of lake water took place March 25, 1867. The length of this tunnel is two miles.

The old seven-foot tunnel runs parallel with, and about fifty feet south of the five-foot tunnel, from the crib to the Chicago avenue Water Works, where it connects with the pump wells; thence, in a straight line to the West Side Water Works, located at Ashland avenue and Twenty-second street. The work on this tunnel commenced July 12, 1872, and the lake portion finished July 7, 1874. The land portion was commenced in July, 1873, and completed October 12, 1874. The water was let in about February 1, 1875. The total length of this tunnel, from the crib to the West Side pumping station, is 31,490 feet.

NEW SEVEN-FOOT TUNNEL.

This tunnel, which terminates with a crib built between the old two-mile crib and the protection breakwater surrounding same, was built in three sections. The first section, extending from the pumping station 1,500 feet eastward to a crib constructed for the purpose of serving as a temporary intake, was commenced and finished during the year 1886. The second section, extending from the shore crib to a crib constructed at the northwest end of the government exterior breakwater, a distance of 3,408 feet, was constructed almost entirely during the year 1891, although the important and extremely difficult task of connecting the new with the old work was not finished before February 1, 1892. The third and last section, extending from the breakwater crib to the old two-mile crib, a distance of 6,000 feet, was

commenced September 9, 1895. Work was progressing from the breakwater crib as well as from the old two-mile crib, and connection between the two headings was made May 30, 1896. After cleaning the new tunnel and the shore shaft, water was let in July 21, 1896.

With the completion of this section, a third tunnel extending from the Chicago avenue Water Works to the two-mile crib, was added to the system.

FOUR-MILE TUNNEL.

This tunnel, which supplies the Central and the Fourteenth street pumping stations, consists of three sections: the lake section, the central land section and the Fourteenth street land section.

The lake section of the tunnel, four miles long and commencing at a shaft located on the lake front at Park Row, was originally intended to have an internal diameter of eight feet, as was also the Fourteenth street land section, but although these tunnels were commenced as eight-foot tunnels, it was found necessary after progressing for some distance from the shore shaft, owing to the difficult soil encountered, to split each of these tunnels into two smaller ones, each with an internal diameter of six feet. These six-foot tunnels were again connected some 8,870 feet west of the four-mile crib and between this point and the crib there is only one tunnel, the internal diameter being eight feet.

The Fourteenth street land tunnels were again connected 252 feet north of the pumping station and continued as one eight-foot tunnel to the pump well.

The central land section runs north to a shaft on Lake Front, opposite Peck court, thence in a westerly direction to the Central pumping station. The shaft at Peck court was originally intended as a starting point for the lake tunnel, but owing to the extremely unfavorable soil encountered, this plan was abandoned. The central land tunnel is a seven-foot tunnel from the Park row shaft to Desplaines street, thence a six-foot tunnel to the pumping station.

The land sections of this system of tunnels were commenced in 1887. The central section was completed January 30, and the Fourteenth street section, March 28, 1889.

The lake tunnel was commenced in June, 1888, and June 27, 1892, connection was made between the shore and the lake headings.

An intermediate crib located $2\frac{1}{2}$ miles from shore had to be abandoned owing to the immense quantities of quicksand encountered at this place, and the tunnel makes a detour to the north around this place.

After thorough cleaning and the reconstruction of defective portions of the tunnel, water was let in December 7, 1892.

JEFFERSON STREET TUNNEL.

In order to unite the old system of water tunnels dependent on the two-mile crib with the four-mile system, into a common whole, a six-foot tunnel was built on Jefferson street from a shaft over the old seven-foot land tunnel at the corner of Van Buren street to a shaft sunk for the purpose over the central land tunnel at the corner of Harrison street. This tunnel is about 625 feet long and can be closed against flow in either direction by a double-faced gate placed in a shaft of its own.

SIXTY-EIGHTH STREET TUNNELS.

The land portion of this system, supplying the Sixty-eighth street Water Works, located at Sixty-eighth street and Oglesby avenue, consists of two land tunnels, each of five feet internal diameter and about 650 feet long, running from shafts on the shore to the wells at the pumping station. The first lake tunnel is a continuation of the north land tunnel. It has an internal diameter of 6 feet, is 5,026 feet long and terminates with a submerged intake crib. This tunnel was built by the old village of Hyde Park in 1884.

An extension of this tunnel to a crib 10,000 feet from shore was commenced in 1892. This extension has an internal diameter of 7 feet. A connection between the west end of this tunnel and the east end of the old six-foot tunnel was contemplated, but owing to the many and serious difficulties presenting themselves, this scheme was abandoned. In the west end of the seven-foot tunnel was placed a bulkhead and a five-foot tunnel branching off from the seven-foot tunnel toward the south was constructed and connects with the shore shaft of the south land tunnel. The Sixty-eighth street Water Works, therefore, receives its supply of water from the old submerged intake through the six-foot tunnel, as well as from the new intake placed ten thousand feet from shore, through the seven-foot and five-foot tunnels.

The old and the new systems are connected by a five-foot cross tunnel on Yates avenue. The new system was completed and water let in in June, 1894.

CRIBS AND INTAKES.

LAKE VIEW — OUTER CRIB.

The gates on the intake shaft at this crib were opened July 12th, from which date the gates at the inner crib have been closed. The crib has been provided with temporary quarters for the crib-keeper, Mr. Milton Edwards, and his assistants.

TWO-MILE CRIB.

The new intake between the crib and its protection breakwater was finished and placed in service during the year. No interruption to the flow of water has occurred.

Captain William Dall is keeper.

FOUR-MILE CRIB.

This crib is in good condition. The light-house tower was painted during the summer.

Captain C. F. Frennesen is in charge.

SIXTY-EIGHTH STREET CRIB.

A new superstructure of this crib has been constructed during the year, which will be further described under the heading "Tunnel and Crib Construction."

Captain C. E. Cherry is in charge of this intake.

PUMPING STATIONS.

NORTH PUMPING STATION.

MR. THOMAS FERRIS, Engineer in charge.

With the exception of the large vertical "Cregier" engine, all the engines at this station have been overhauled and are now in good condition for continuous service. The Holly engines and the engine-room have been painted during the year. The old marine boilers are in such condition that they have to be repaired constantly.

A new system of drainage has been constructed, a 24-inch cast-iron pipe having been laid from the pumping station to the lake shore, a distance of about 1,200 feet.

Since the completion of the north shore extension tunnel, there has at all times been sufficient water in the wells to supply all the engines.

WEST PUMPING STATION.

MR. JOHN SANBORN, Engineer in charge.

The engines at this station have been in continuous service the entire year, with the following exceptions: No. 50 was stopped thirteen and one-half days in January on account of the large crank shaft breaking in the latter part of 1895, and waiting for a new shaft to be finished and placed. No. 25 was stopped eight days in April for general repairs. Other repairs have been done at nights and Sundays, when an engine could be shut down without reducing the pressure.

The buildings need exterior and interior painting.

FOURTEENTH STREET PUMPING STATION.

MR. GEORGE F. MATTHEWS, Engineer in charge.

All the engines at this station have been kept in good repair during the year. New discharge plates made entirely of brass have been placed in engines Nos. 1 and 2. All the engines in this station have been filled between the bed plates and cylinders under the water chambers with iron chips backed up by the best Portland cement. All jacket pipes on the three engines have been renewed. All the high pressure and intermediate cylinders have been equipped with Swain's metallic packing. The repairs to the engines have been made at night time.

All the steam pipes, valves and fittings in the boiler room from two to twelve inches have been replaced by new and suitable material. The steam pipes have been covered with asbestos covering and painted.

The boilers are being refitted with new Hawley tubes. Part of the boiler room has been concreted, and cars, tracks and turn-tables have been repaired. All pipes and machinery in the basement have been painted and the entire basement whitewashed. A new roof with three ventilators has been placed over the boiler room and the engine roof; gutters and down spouts have been repaired.

CENTRAL PUMPING STATION.

MR. PHILIP PETRIE, Engineer in charge.

The engines and boilers at this station are in good condition, though running continuously during the year—few repairs being necessary and those of a trifling and inexpensive nature.

SIXTY-EIGHTH STREET PUMPING STATION.

MR. GRANVILLE KIMBALL, Engineer in charge.

The four Gaskill engines and one Worthington high duty engine have been running continuously during the year at such speed as would maintain an average pressure of fifty-five pounds per square inch on the mains at the pumping station, except when it was found necessary to stop any one of them for repairs.

The Worthington engine has been supplied with a new independent duplex condenser and air pump. The old Cope & Maxwell engines are in good condition, but at no time during the operation of the five main engines has it been found necessary to run both of them, though one was run continuously during the summer months. The two old vertical Holly engines have not been in service. The boiler capacity at this station is barely sufficient to run the works, and consists of the following: Four batteries of two boilers each, one battery of four boilers (these twelve boilers are in good condition) and one battery of four boilers, two of which were condemned in 1894 and are out of service.

The electric light plant continues to give satisfaction, the cost for the year being less than one-third of the contract price formerly paid.

LAKE VIEW PUMPING STATION.

MR. F. D. PARKER, Engineer in charge.

The increasing demand on this station necessitates the continuous running of the four pumps, all of which are in good condition, extensive repairs having been made on them during the year.

Boilers, buildings and grounds are all in good order. Water was supplied to this station through a 36-inch intake pipe from the 30th of June to the 12th of July, while tunnel connections were being made, decreasing the amount of pumpage considerably.

WASHINGTON HEIGHTS PUMPING STATION.

MR. SIDNEY CURNICK, Engineer in charge.

This plant is in good condition, no extensive repairs having been necessary during the year. A new storage tank was placed on the tower during the summer, and the station is now well equipped to take care of the district.

NORWOOD PARK PUMPING STATION.

MR. FRANK NORTON, Engineer in charge.

The small pump at this station is in good working order. During the year 21,938,200 gallons of water were pumped, being an increase of over 3,000,000 gallons as compared with last year's pumpage.

AUXILIARY PUMPING STATIONS.

CANAL PUMPING STATION.

MR. FRANK M. NYE, Engineer in charge.

This station is in first-class order. All of the engines have been thoroughly overhauled; brasses, keys and other minor parts renewed where necessary. The boilers have also been inspected, cleaned and put in first-class order.

During the year the pumps have been shut down occasionally for repairs, but only one at a time, and then for as short a time as possible; they have also been stopped to allow the river to rise sufficiently to float vessels stuck in the draw at Fuller street bridge, a contingency that frequently occurs in the present condition of the Chicago river.

The amount of water pumped from the Chicago river into the Illinois and Michigan canal at this station during the year, was 26,075,989,152 cubic feet, or an average of 49,476 cubic feet per minute for the whole year, at a total cost of \$67,318.00, which is an increase in pumpage of 116,799,144 cubic feet, and a reduction in cost of \$11,035.60 compared with the year 1895. The average head pumped against was 6.5.

FULLERTON AVENUE PUMPING STATION.

MR. FRED GIELOW, Engineer in charge.

The plant at this station has been thoroughly overhauled and repaired during the year, and is now in first-class condition.

The total amount of lake water pumped into the north branch of the Chicago river during the year was 3,935,415,127 cubic feet, at a total cost of \$12,964.19, which, compared with 1895, shows an increase in pumpage of 634,895,861 cubic feet, and a reduction in cost of \$4,090.06.

The appended diagram shows the daily pumpage at each station, separately and combined, with the quantities, heads and temperatures of the air and water.

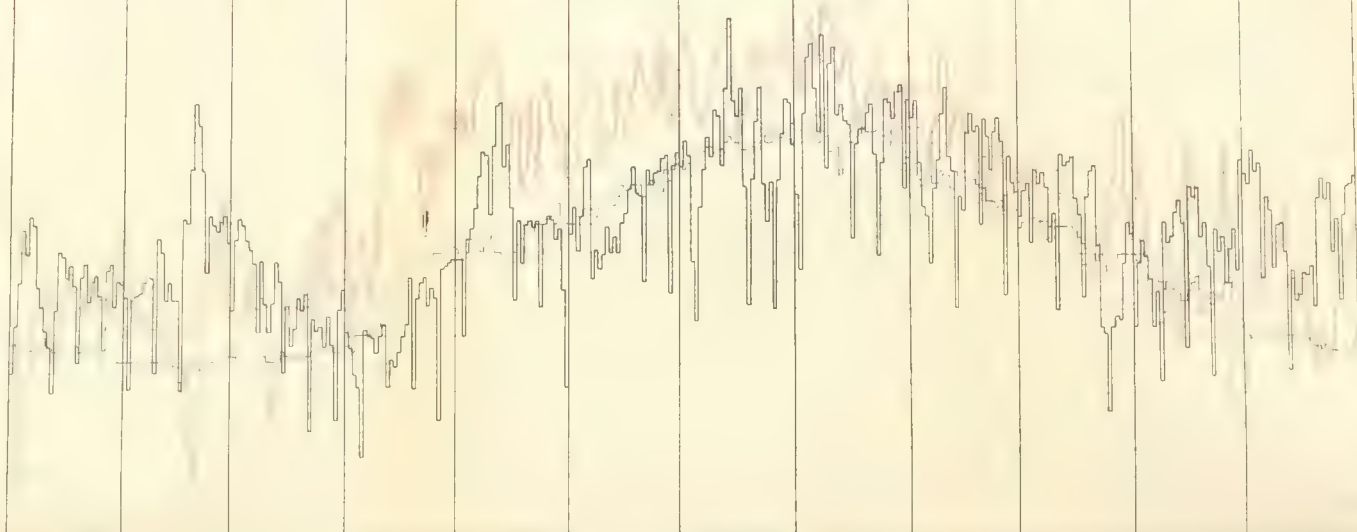
The following tables give information in detail regarding pumpage, expenditure, etc.

Table "A" gives the monthly and annual pumpages at the respective stations, and table "B" gives the most important figures relating to quantities and expenses. Table "C" gives a comparative statement of pumpage and expenditures for the years 1894, 1895 and 1896.

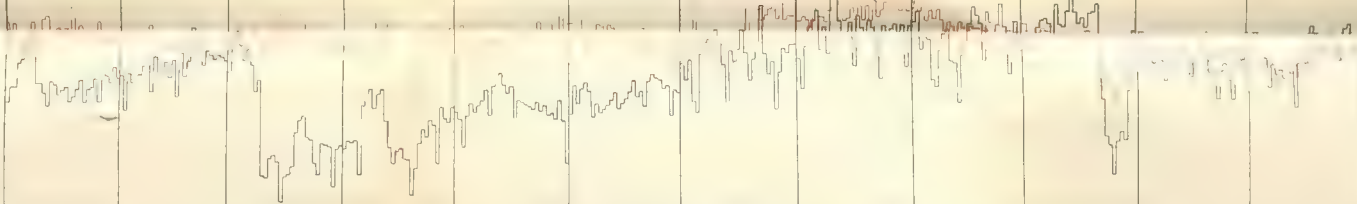
DIAGRAM OF PUMPAGE FOR 1896.

JANUARY. FEBRUARY. MARCH. APRIL. MAY. JUNE. JULY. AUGUST. SEPTEMBER. OCTOBER. NOVEMBER. DECEMBER.

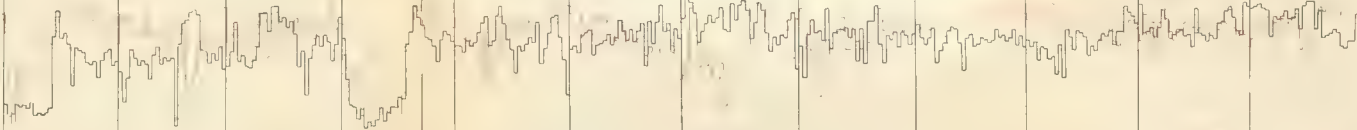
THE CITY AS A WHOLE



NORTH SIDE



WEST SIDE

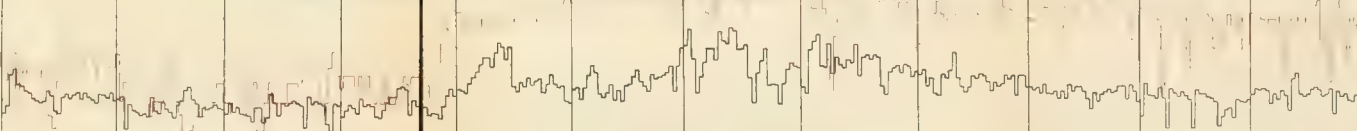


FOURTEENTH STREET

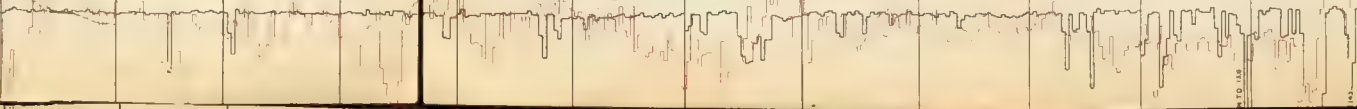


SIXTYEIGHTH

STREET

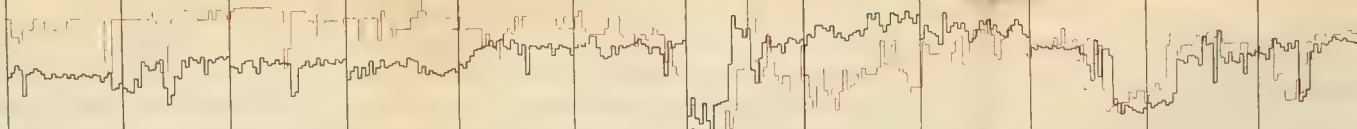


CENTRAL



LAKE

VIEW



WASHINGTON

HEIGHTS



Temperature of Water 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100.

Head in Feet 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200.

Head in Feet 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200.

Temperature of Water 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100.

Head in Feet 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200.

Head in Feet 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150, 160, 170, 180, 190, 200.

TABLE "B." OPERATIONS OF PUMPING STATIONS, CHICAGO, DURING 1896.

| | North Side. | West Side. | Fourteenth Street. | Central. |
|---|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Anthracite Coal, tons..... | 12,797 ¹⁴⁷⁰ | ..... | ..... | ..... |
| Bituminous Coal, tons..... | 10,139 ¹⁸⁶⁰ | 18,212 ¹⁰⁰⁰ | 9,254 ¹⁰⁰⁰ | 7,243 ¹⁸⁰⁰ |
| Fuel Oil, gallons..... | ..... | ..... | ..... | ..... |
| Price of Anthracite Coal, per ton..... | \$4.93 | ..... | ..... | ..... |
| Price of Bituminous Coal, per ton..... | 2.58 | \$2.11 | ..... | ..... |
| Price of Fuel Oil, per 100 gallons..... | ..... | ..... | \$2.58 | \$2.59 |
| Cost of Anthracite Coal..... | 63,156.57 | ..... | ..... | ..... |
| Cost of Bituminous Coal..... | 26,193.98 | ..... | ..... | ..... |
| Cost of Fuel Oil..... | ..... | 38,514.36 | 23,927.05 | 18,761.14 |
| Total Cost of Fuel..... | ..... | ..... | ..... | ..... |
| Salaries..... | 89,350.55 | 38,514.36 | 23,927.05 | 18,761.14 |
| Cost of Oil, Stores and Lighting..... | 49,476.56 | 33,316.66 | 39,797.00 | 24,308.92 |
| Repairs to Buildings, Pumps, Engines and Boilers..... | 3,030.90 | 1,585.04 | 1,934.25 | 3,300.85 |
| Total Expense of Operation and Maintenance..... | 2,882.60 | 1,271.17 | 9,718.02 | 1,401.09 |
| All other Expenses combined..... | 144,740.61 | 74,687.23 | 75,876.32 | 47,772.00 |
| Grand Total of Expenses..... | 1,371.16 | 400.62 | 15.38 | ..... |
| Total Gallons Pumped during the year..... | 146,111.77 | 75,087.85 | 75,391.70 | 47,772.00 |
| *Per Cent of Pumpage of City as a whole..... | 24,581,154,740 | 21,119,491,780 | 14,206,388,121 | 11,188,868,160 |
| Greatest Amount Pumped in one day, gallons..... | 26.4 | 22.7 | 15.3 | 12.0 |
| Least Amount Pumped in one day, gallons..... | 78,494,980 Oct. 14 | 64,692,600 July 2 | 45,558,507 Nov. 30 | 31,907,680 May 2 |
| Average Pumped per day, gallons..... | 49,734,640 April 19 | 45,423,000 April 7 | 30,303,666 Nov. 8 | 15,143,282 Dec. 27 |
| Average Head against Pumps, in feet..... | 67,161,625 | 57,703,529 | 38,815,678 | 30,434,093 |
| Cost of Fuel Pumping 1,000,000 gallons, one foot high..... | 109.2 | 104.3 | 113.5 | 100.4 |
| Total Cost of Pumping 1,000,000 gallons, one foot high..... | 3 ³³ / ₁₀₀ c. | 1 ⁴⁵ / ₁₀₀ c. | 1 ⁴⁵ / ₁₀₀ c. | 1 ⁴⁵ / ₁₀₀ c. |
| Total Cost of Pumping 1,000,000 gallons, one foot high..... | 5 ³⁹ / ₁₀₀ c. | 3 ³⁹ / ₁₀₀ c. | 4 ¹⁶ / ₁₀₀ c. | 4 ¹⁶ / ₁₀₀ c. |

*Norwood Park Station not included.

TABLE "B." OPERATIONS OF PUMPING STATIONS, CHICAGO, DURING 1896—CONTINUED.

| | Sixty-eighth Street. | Lake View. | Washington Hts. | The City as a whole. |
|--|----------------------------------|---------------------------------------|-------------------------------------|--|
| Anthracite Coal, tons | ..... | ..... | ..... | 12,797 ¹ / ₂ 476 |
| Bituminous Coal, tons | ..... | 9,702 ¹ / ₂ 155 | ..... | 55,306 ¹ / ₂ 33 |
| Fuel Oil, gallons | ..... | ..... | 754 ¹ / ₂ 999 | 2,174,076 |
| Price of Anthracite Coal, per ton | 2,174,076 | ..... | ..... | \$4.93 |
| Price of Bituminous Coal, per ton | ..... | ..... | ..... | 2.34 |
| Price of Fuel Oil, per 100 gallons | ..... | \$2.10 | \$2.35 | 1.69 |
| Cost of Anthracite Coal | \$1.69 | ..... | ..... | 63,156.57 |
| Cost of Bituminous Coal | ..... | 20,387.89 | 1,771.90 | 129,556.32 |
| Cost of Fuel Oil | ..... | ..... | ..... | 36,635.87 |
| Total Cost of Fuel | 36,635.87 | 20,387.89 | 1,771.90 | 229,348.76 |
| Salaries | 36,635.87 | 21,940.78 | 3,150.00 | 202,137.45 |
| Cost of Oil, Stores and Lighting | 30,147.53 | 1,531.06 | 141.88 | 13,367.19 |
| Repairs to Buildings, Pumps, Engines and Boilers | 1,843.21 | 4,026.79 | 186.58 | 23,830.84 |
| Total Expense of Operation and Maintenance | 4,344.59 | 47,886.52 | 5,250.36 | 468,684.24 |
| All other Expenses combined | 72,971.20 | ..... | ..... | 2,312.78 |
| Grand Total of Expenses | 525.62 | 47,886.52 | 5,250.36 | 470,997.02 |
| Total Gallons Pumped during the year | 73,496.82 | 8,409,924,491 | 83,201,570 | 93,040,314,218 |
| *Per Cent of Pumpage of City as a whole | 13,479,347,156 | 9.0 | 0.1 | 100 |
| Greatest Amount Pumped in one day, gallons | 14.5 | 29,452,645 Aug. 28 | 309,960 Oct. 31 | 284,748,789 July 14 |
| Least Amount Pumped in one day, gallons | 45,707,997 July 13 | 13,230,675 July 7 | 162,720 Sep. 30 | 222,140,929 April 5 |
| Average Pumped per day, gallons | 31,031,948 Mar. 29 | 22,977,936 | 227,327 | 254,208,509 |
| Average Head against Pumps, in feet | 36,828,817 | 100.3 | 104.0 | 109.5 |
| Cost of Fuel Pumping 1,000,000 gallons, one foot high | 127.4 | 2 ¹ / ₂ c. | 20 ¹ / ₂ c. | 2 ¹ / ₂ c. |
| Total Cost of Pumping 1,000,000 gallons, one foot high | 2 ¹ / ₂ c. | 5 ¹ / ₂ c. | 60 ¹ / ₂ c. | 4 ¹ / ₂ c. |

*Norwood Park Station not included.

TABLE "C." COMPARATIVE STATEMENT OF OPERATIONS OF PUMPING STATIONS, 1894-'95-'96.

| | North Side. | West Side. | Fourteenth Street. | Central. | Sixty-eighth Street. | Lake View. | Washington Heights. | *The City as a whole. |
|--|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------------------|-------------------------------------|
| Total Pumpage, 1896. | 24,581,154,740 | 21,119,491,780 | 14,206,388,121 | 11,138,868,160 | 13,479,347,156 | 8,409,924,491 | 83,201,570 | 93,018,376,018 |
| Total Pumpage, 1895. | 24,083,441,965 | 19,586,984,260 | 15,255,686,760 | 10,847,506,943 | 13,998,566,131 | 8,045,239,360 | 85,467,530 | 91,902,892,940 |
| Total Pumpage, 1894. | 21,699,012,770 | 19,276,164,380 | 16,052,784,584 | 10,257,974,975 | 12,788,587,808 | 6,853,272,432 | 132,470,900 | 87,060,267,349 |
| Increase, 1895 over 1894. | 2,384,429,195 | 310,819,880 | ..... | 589,531,968 | 1,209,978,823 | 1,191,966,928 | ..... | 4,842,625,600 |
| Increase, 1896 over 1894. | 2,882,141,970 | 1,843,327,400 | ..... | 880,893,185 | 609,759,848 | 1,556,652,059 | ..... | 5,958,108,669 |
| Decrease, 1895 over 1894. . . . . | ..... | ..... | 797,097,824 | ..... | ..... | ..... | 47,003,370 | ..... |
| Decrease, 1896 over 1894. . . . . | ..... | ..... | 1,846,396,463 | ..... | ..... | ..... | 49,269,380 | ..... |
| Total Expense of Operation and Maintenance, 1894. | \$ 157,416.24 | \$ 105,865.63 | \$ 97,284.97 | \$ 63,263.86 | \$ 76,246.02 | \$ 59,063.05 | \$ 6,621.08 | \$ 565,760.85 |
| Total Expense of Operation and Maintenance, 1895. | 155,533.31 | 92,351.42 | 79,403.17 | 58,571.31 | 83,498.39 | 61,131.40 | 5,141.63 | 535,630.63 |
| Total Expense of Operation and Maintenance, 1896. | 144,740.61 | 74,687.23 | 75,376.32 | 47,772.00 | 72,971.20 | 47,886.52 | 5,250.36 | 468,684.24 |
| Decrease in Cost, 1895 compared with 1894. | 1,882.98 | 13,514.21 | 17,881.80 | 4,692.55 | ..... | ..... | 1,479.45 | 30,130.22 |
| Decrease in Cost, 1896 compared with 1894. | 12,675.63 | 31,178.40 | 21,908.65 | 15,491.86 | 3,274.82 | 11,176.53 | 1,370.72 | 97,076.61 |
| Increase in Cost, 1895 compared with 1894. . . . . | ..... | ..... | ..... | ..... | 7,252.37 | 2,068.35 | ..... | ..... |
| Total Cost of Pumping 1 Mill. Galls. 1 ft. high, 1894. | 6 ⁵⁵ / ₁₀₀ c. | 5 ²³ / ₁₀₀ c. | 5 ³⁶ / ₁₀₀ c. | 5 ⁹³ / ₁₀₀ c. | 4 ⁶⁷ / ₁₀₀ c. | 7 ⁶³ / ₁₀₀ c. | 44 ⁶³ / ₁₀₀ c. | 5 ⁸² / ₁₀₀ c. |
| Total Cost of Pumping 1 Mill. Galls. 1 ft. high, 1895. | 5 ³² / ₁₀₀ c. | 4 ⁶³ / ₁₀₀ c. | 4 ⁶⁴ / ₁₀₀ c. | 5 ³³ / ₁₀₀ c. | 4 ⁸⁶ / ₁₀₀ c. | 6 ⁸⁷ / ₁₀₀ c. | 57 ⁴⁸ / ₁₀₀ c. | 5 ³⁰ / ₁₀₀ c. |
| Total Cost of Pumping 1 Mill. Galls. 1 ft. high, 1896. | 5 ²⁰ / ₁₀₀ c. | 3 ²⁹ / ₁₀₀ c. | 4 ⁶⁷ / ₁₀₀ c. | 4 ⁶⁷ / ₁₀₀ c. | 4 ²⁵ / ₁₀₀ c. | 5 ⁶⁸ / ₁₀₀ c. | 60 ⁶⁷ / ₁₀₀ c. | 4 ⁶⁰ / ₁₀₀ c. |
| Decrease in Cost, 1895 compared with 1894. . . . . | ..... | ..... | 72 ⁶ / ₁₀₀ c. | ..... | ..... | ..... | ..... | ..... |
| Decrease in Cost, 1896 compared with 1894. | 1 ¹⁶ / ₁₀₀ c. | 1 ⁸⁴ / ₁₀₀ c. | 63 ⁶ / ₁₀₀ c. | 1 ⁷² / ₁₀₀ c. | 42 ⁶ / ₁₀₀ c. | 1 ⁹⁵ / ₁₀₀ c. | ..... | 1 ²² / ₁₀₀ c. |
| Increase in Cost, 1895 compared with 1894. . . . . | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Increase in Cost, 1896 compared with 1894. . . . . | ..... | ..... | ..... | ..... | ..... | ..... | 12 ⁸³ / ₁₀₀ c. | ..... |
| ..... | ..... | ..... | ..... | ..... | ..... | ..... | 16 ⁹⁴ / ₁₀₀ c. | ..... |

* Norwood Park Station not included.

NORTH SIDE SHOPS.

MR. IRA W. BROWN, Superintendent.

The following new pipe line fixtures and work for the various departments have been made during the year :

HYDRANTS—NEW.

| | 2½-inch Single | 2½-inch Double | 4-inch Double |
|--|-------------------|-------------------|------------------|
| On hand January 1, 1896..... | ..... | 16 | 13 |
| Manufactured during 1896 | 473 | 1,097 | 4 |
| Total..... | 473 | 1,113 | 17 |
| Delivered to Water Pipe Extension..... | 424 | 795 | 5 |
| On hand January 1, 1897..... | 49 | 318 | 12 |

STOP-VALVES—NEW.

| | 4-inch | 6-inch | 8-inch | 12-inch | 16-inch | 24-inch | 36-inch |
|-----------------------------------|--------|--------|--------|---------|---------|---------|---------|
| On hand January 1, 1896..... | 9 | 2 | 15 | 12 | 3 | 4 | 1 |
| Manufactured during 1896 | 37 | 202 | 92 | 50 | 6 | 7 | ..... |
| Purchased during 1896 | 88 | 406 | 149 | ..... | ..... | ..... | ..... |
| Total..... | 134 | 610 | 256 | 62 | 9 | 11 | 1 |
| Delivered to Water Pipe Extension | 73 | 600 | 240 | 37 | 3 | 8 | 1 |
| On hand January 1, 1897 | 61 | 10 | 16 | 25 | 6 | 3 | ..... |

TUNNEL AND CRIB CONSTRUCTION.

MR. JOHN ERICSON, Assistant City Engineer, is in charge of this branch of the Bureau work.

LAKE VIEW TUNNEL.

This tunnel was practically completed and connection made with the shaft at the outer crib, two miles from shore, at the close of the year 1895, and a full history of its construction was given in the annual report for 1895. The connection between the tunnel leading to the pumping station from the intermediate crib, through which the water was being taken, and the tunnel running from the working shaft to the outer crib, was all that was left to be constructed. During January, 1896, all the brickwork in the tunnel leading to the outer crib and the additional depth of shaft at the outer crib was finished and pointed up and the tunnel cleaned out.

Thereafter, a drift was run from the working shaft at the intermediate crib to a point directly under the center of the intake shaft. The contractor's men, except a few necessary to keep the tunnel clear of water, were then laid off until the City was ready to have the connection made. In order to make this connection, it was necessary to provide a temporary intake for the Lake View pumping station. It was intended to utilize an old thirty-inch pipe leading from the shaft near the pumping station out into the lake, but an examination by a diver disclosed the fact that the pipe was buried in and filled for a long distance with sand and otherwise defective, necessitating quite an expenditure of money to make it serviceable. It was, therefore, abandoned and a new thirty-six inch pipe laid from the shore shaft to a point in the lake about 360 feet from shore. This required 600 feet of cast-iron pipe. The land portion, 240 feet, was laid by this Bureau, the lake portion, 360 feet, by the Dunham Towing and Wrecking Company of this City. A plug was placed over the eye of the tunnel in the shore shaft, the gates of the inner crib were shut down June 30th and the pumping out of the old tunnel commenced.

This connection was finished and the gates at the outer crib opened July 12th.

Mr. R. B. Wilcox was the Assistant Engineer in local charge of this tunnel.

NORTH SHORE TUNNEL EXTENSION.

Seven Feet Internal Diameter.

The tunnel described in last year's report under this heading was completed during the year. At the beginning of the year, 1,344 lineal feet of tunnel had been constructed from the breakwater crib; the intake crib, located between the old two-mile crib and its protection breakwater, was finished and the cast-iron cylinders for the intake shaft had been delivered on the crib.

Considerable difficulty and delay were encountered in sinking this shaft owing to great quantities of loose brick, timbers and large stones, which had been dumped into the lake when the new superstructure of the old two-mile crib was constructed and when the old brick light-house tower was torn down.

While excavating for the first length of underpinning, the shaft started to sink, breaking the timbers across the well, carrying the floor down, forcing the piles down in the ground and breaking two of the cluster caps. An extra section of shaft was then ordered, allowing the cast-iron portion of the shaft to be sunk to the hardpan. The shaft was then quickly finished and tunneling westward commenced March 13, 1896. After this date, the construction of the tunnel progressed uninterruptedly from both cribs until May 30th, when the two headings were brought together and connection made.

The progress on this tunnel during the year was as follows :

| | |
|--|----------------------|
| From Breakwater Crib | 4,438 lineal feet. |
| From Two-mile Crib, including a short drift east..... | 1,562.5 lineal feet. |

The actual tunneling from the breakwater crib was commenced October 25, 1895. The tunnel proper was completed in 172 working days. Tunneling from the two-mile crib continued sixty working days.

The average daily progress in the breakwater drift was 25.8 lineal feet, and in the two-mile crib drift, 26.0 lineal feet.

Considerable time was required to clean the new tunnel and to remove a bulkhead and a lot of clay, placed in the shore shaft at the foot of Chicago avenue, in order to make it possible to connect the new with the old work at the breakwater crib. This new tunnel was opened for service July 21, 1896.

Mr. C. T. Anderson was the Assistant Engineer in local charge of this improvement. Mr. Paul G. Brown was assistant.

NEW LAND TUNNEL.

SECTION ONE.

This section extends from a point near the lake shore, at the foot of Oak street, to a point near the intersection of North Green street and Grand avenue, a total distance of 8,666 feet. The tunnel on this section has an internal diameter of ten feet.

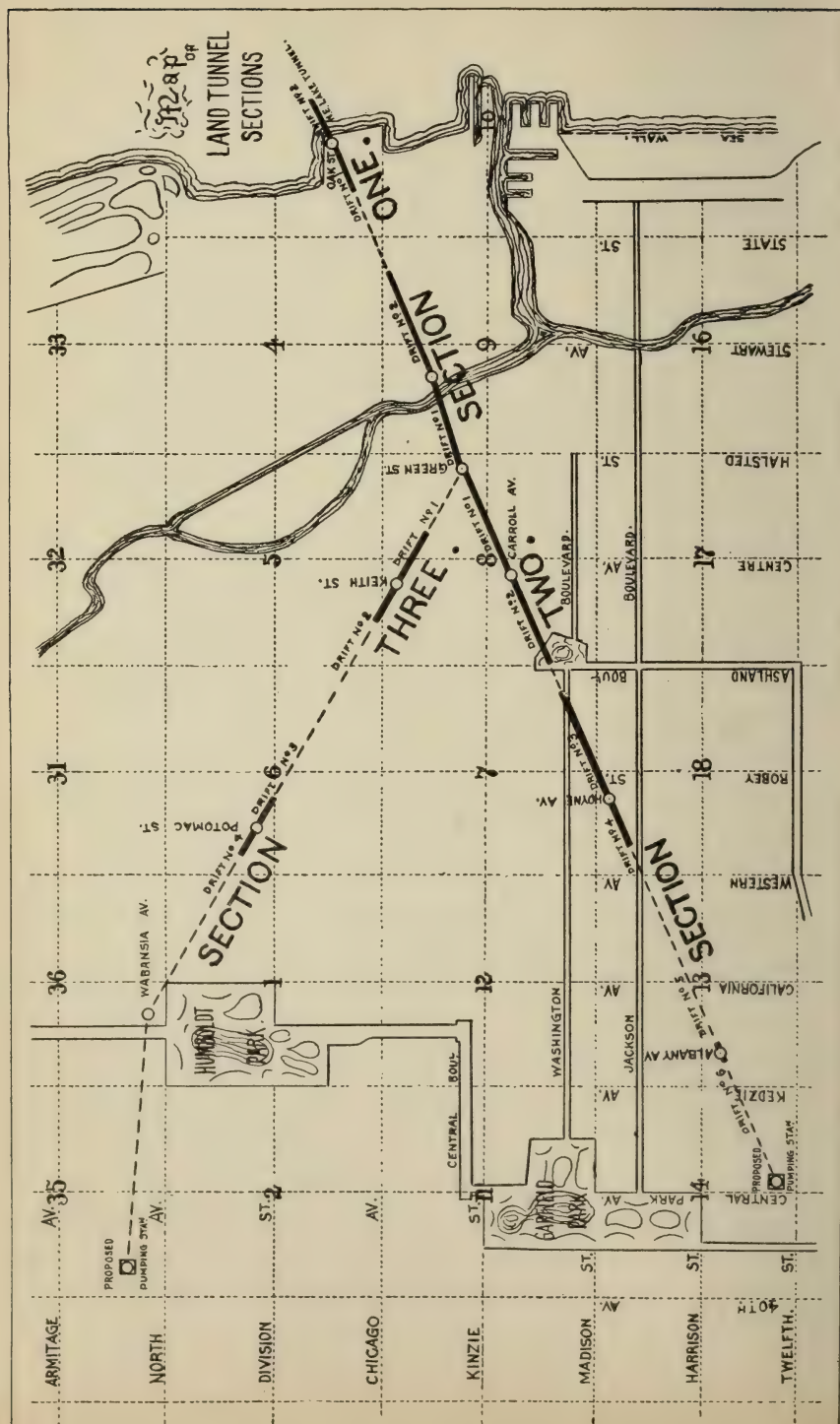
GREEN STREET SHAFT.

Active work on this section was commenced January 18, 1896. Excavation for the Green street shaft was commenced January 24th, and the shaft was completed February 9th. The shaft has an internal diameter of ten feet to an elevation of -29.2. From this point it is widened until at -59.0 it has a diameter of twelve feet. This mode of construction was necessary owing to the large gas and water mains and sewer in the street. This shaft has a total depth of 99.2 feet. A length of 31 feet of 10-foot tunnel was constructed eastward from this shaft.

KINGSBURY STREET SHAFT.

Work from that point was then suspended and a twelve-foot shaft sunk at the intersection of Kingsbury and Ontario streets. Excavation on this shaft was commenced February 27th, and the shaft completed March 14th. Both the Green street and the Kingsbury street shafts were constructed by the underpinning process, and no unusual difficulties were met with. Drifting eastward from Kingsbury street shaft was commenced March 16th, and the west drift was started March 19th. Work was discontinued in the west drift May 7th, and in the east drift May 11th, in order to enable the contractor to install an excavating machine, which was put in the west drift. This machine was experimented with until about the middle of July, when it was abandoned and active work resumed in both drifts. No unusual difficulties were thereafter met with in the prosecution of this work; the soil generally being a very hard clay, at places approximating hardpan. Occasional sand and gas pockets were encountered.

Connection was made November 30th, with the drift at the Green street shaft. Work on the east drift was continued to the end of the year.



The distance between the Kingsbury and Green street shafts is 2,216 feet, of which 2,185 feet was constructed from the former shaft.

A total of 2,679 feet of tunnel was completed eastward from the Kingsbury street shaft during the year.

OAK STREET SHAFT.

This shaft, which marks the eastern terminus of section 1 and beginning of the lake tunnel, was commenced July 20th and completed August 14th, 1896. In sinking this shaft, it was found necessary owing to the large amount of water encountered to use a steel caisson, twenty-four feet in depth, lined with two rings of brick for the upper portion of the shaft. Below this depth, to the bottom of the shaft, the usual method of underpinning with a lining of four rings of brick was employed.

Owing to a strike among the miners, actual tunneling was not commenced until August 31st.

There have been constructed 1,163 lineal feet of tunnel westward from this shaft during the year. The character of the soil has been generally a very hard blue clay resembling hardpan.

At a point 513 feet from the shaft, a vein of quicksand was uncovered in the bottom of the drift, causing a strong flow of sand, silt and water accompanied by considerable gas. This place, however, was successfully passed through.

Section 1 has been in charge of Mr. John Spengler, Assistant Engineer, with Mr. Edwin Woods as sub-assistant.

SECTION TWO.

This section is an extension of section one in a southwesterly direction, and the tunnel has an internal diameter of eight feet. Its western terminus is the site of the proposed pumping station at the northeast corner of Central Park avenue and Fillmore street. Actual work on this section commenced November 23, 1895, and at the close of that year the Carroll avenue shaft, 100 feet deep, 209 lineal feet of tunnel in drift No. 1 and 23 lineal feet in drift No. 2, were completed.

CARROLL AVENUE SHAFT.

Drift No. 1.—The work in this drift progressed continuously until May 23d, when connection was made with the Green street shaft. The total number of feet of tunnel constructed during the year was 2,550.

The general character of the ground in this drift was blue clay, with sand and gravel pockets which at some places extended twelve to fifteen feet above the excavation.

Drift No. 2.—Work on this drift was resumed February 4, 1896, and carried on continuously until June 24, when it was abandoned owing to the numerous complaints from residents in the neighborhood on account of the blasting. During the year, 2,603 lineal feet of tunnel were constructed.

The character of the soil varied considerably. From the shaft to a point 386 feet west thereof, the tunnel runs almost entirely through sand and gravel, which caused large caves and slow progress. The balance of this drift runs through clay mixed with large boulders and through occasional sand pockets.

HOYNE AVENUE SHAFT.

Work on this shaft was commenced June 2d and finished June 15th. This shaft has a clear diameter of ten feet and is 99.5 feet deep.

Drift No. 3.—Tunneling in this drift was commenced June 16th and continued throughout the year. The progress made during the year is 3,127 lineal feet.

The character of the soil in this drift has been mainly soft blue clay, with more or less soft and wet bottom. Considerable quantities of large boulders filled the lower part of the tunnel section from station 19+52, a distance of 300 feet. Beyond this point, the soil has been a mixture of clay and loam.

Drift No. 4.—Tunneling in this drift commenced June 24th. Solid rock in the bottom of this drift was encountered 282 feet west of the shaft and kept rising gradually until at 697 feet from the shaft, where we succeeded in bringing the tunnel entirely into solid rock without the roof falling. This was accomplished after several trials and failures to make the rock roof stand while firing the blasts.

The progress in this drift during the year is as follows:

Tunnel completed, 701 lineal feet.

Tunnel excavated through rock, 496 lineal feet.

ALBANY AVENUE SHAFT.

The construction of this shaft commenced November 4th and by the 8th was finished to the solid rock 61.5 feet from the surface. On the 22d, the shaft had been excavated to a sufficient depth to allow the top of the tunnel drifts to be taken out.

At the close of the year, drift No. 5 had been excavated a distance of 174 feet and drift No. 6, 63.0 feet from the shaft.

The rock through which this tunnel is being excavated shows a tendency to disintegrate when exposed to the air.

Mr. F. G. Ewald was, in September, 1896, succeeded by Mr. C. T. Anderson as Assistant Engineer in local charge of this section. Mr. William G. Atwood is his sub-assistant.

SECTION THREE.

The tunnel on this section is eight feet internal diameter and extends from the Green street shaft to a point near the intersection of Springfield avenue and Bloomingdale road, where the City has purchased a lot on which the proposed new pumping station will be erected. This tunnel, with the exception of about 2,000 feet of the southwest end next to the Green street shaft, is in solid lime rock.

Four working shafts are planned for this section: one on Keith street just south of Chicago avenue, one on Potomac avenue near Leavitt street, one on Wabansia avenue near Humboldt boulevard, and the fourth on the site of the proposed pumping station. The latter shaft will also be used as pump well.

During December, 1895, work was commenced on the shafts at Keith street and Potomac avenue, and tunneling at these points in both directions was carried on during 1896.

On account of controversies between the City and the contractors, work was entirely suspended September 4th. November 14th work was again resumed at both points and continued to the close of the year.

KEITH STREET SHAFT.

This shaft was timbered down to an elevation of -51.2, where rock was encountered, and this timbering is such as to finally admit the necessary brickwork to make the shaft ten feet internal diameter.

The total depth of the shaft is 88.5 feet.

The shaft was completed January 13, and both drifts at this point commenced January 14. The drift running southeasterly is known as No. 1, and the one running northwesterly as No. 2. May 12th bricklaying was commenced.

More or less water has been encountered, but not sufficient to seriously inconvenience the work. The following shows the progress made in these drifts during the year.

| Drift No. | Total distance excavated—feet. | Total brickwork | | |
|-----------|--------------------------------|-----------------|---------|----------|
| | | Arch. | Invert. | Average. |
| 1 | 1,181 | 648 | 685 | 666½ |
| 2 | 1,134 | 294 | 520 | 407 |

POTOMAC AVENUE SHAFT.

This shaft is timbered down to an elevation of -34.9, which is the elevation of the solid rock surface. The total depth of the shaft is 90 feet. The shaft was completed January 27th and both drifts started January 28th.

The drift running southeasterly is known as No. 3 and the one running northwesterly as No. 4.

The progress during the year was as follows:

| Drift No. | Total distance excavated—feet. | Total brickwork | | Average. |
|--------------|-----------------------------------|-----------------|---------|----------|
| | | Arch. | Invert. | |
| 3 | 698 | 104 | 504 | 304 |
| 4 | 735½ | 183 | 299 | 241 |

No work has been done as yet on the other shafts. Borings were made at the site of the proposed pumping station to determine elevation of rock, which is -14.8.

The surface surveys were extended as far west as Springfield avenue, and the taking of topography along the line of the tunnel continued.

Mr. E. W. Jackson, having been transferred to the northeast lake tunnel, Mr. John H. Spengler was placed in charge of this section as Assistant Engineer.

RECAPITULATION.

SECTION ONE.

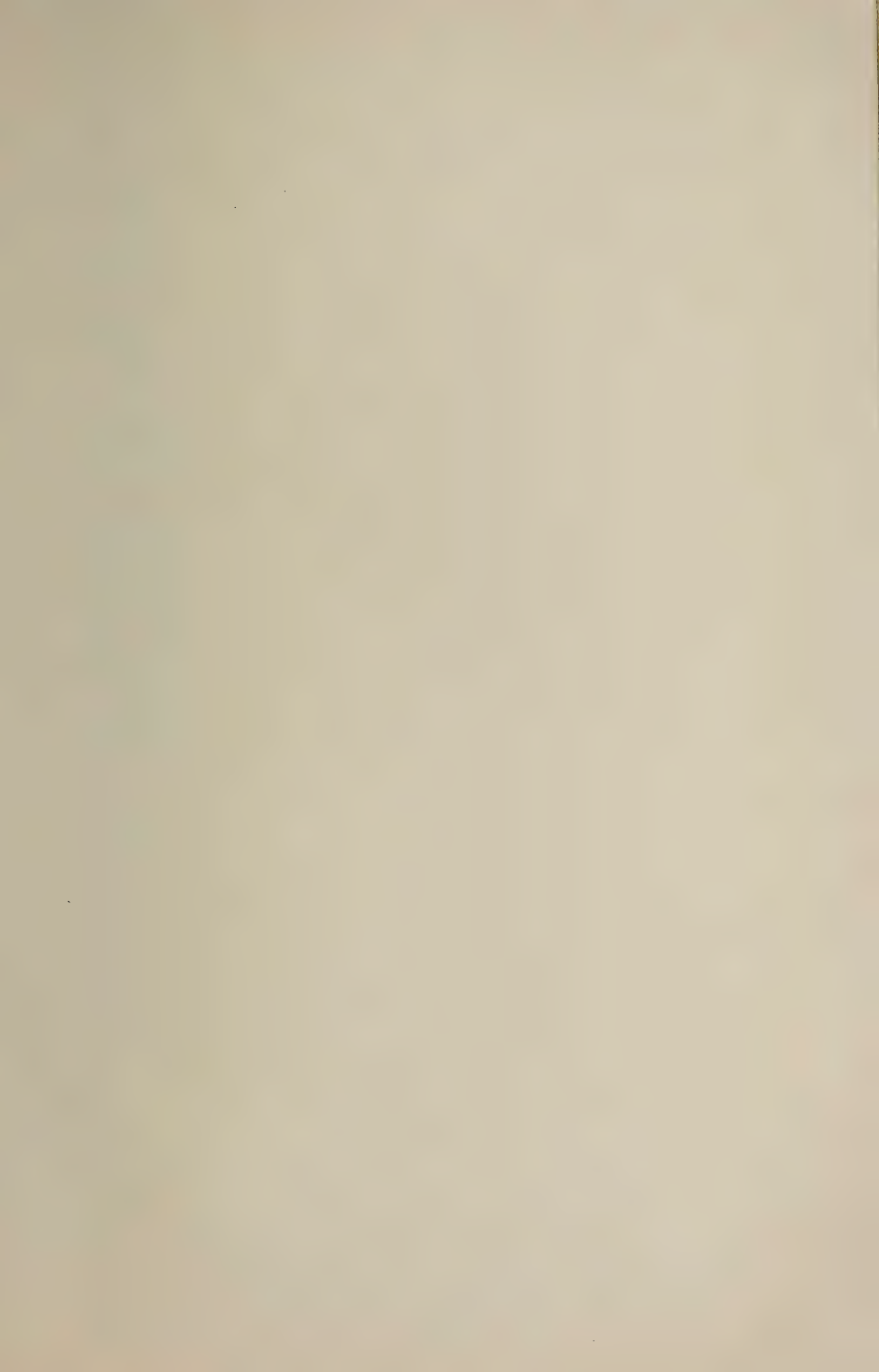
| | |
|--|-------|
| Total number of shafts constructed..... | 3 |
| Total number of feet ten-foot tunnel completed..... | 6,058 |
| Total number of feet ten-foot tunnel unfinished..... | 2,605 |

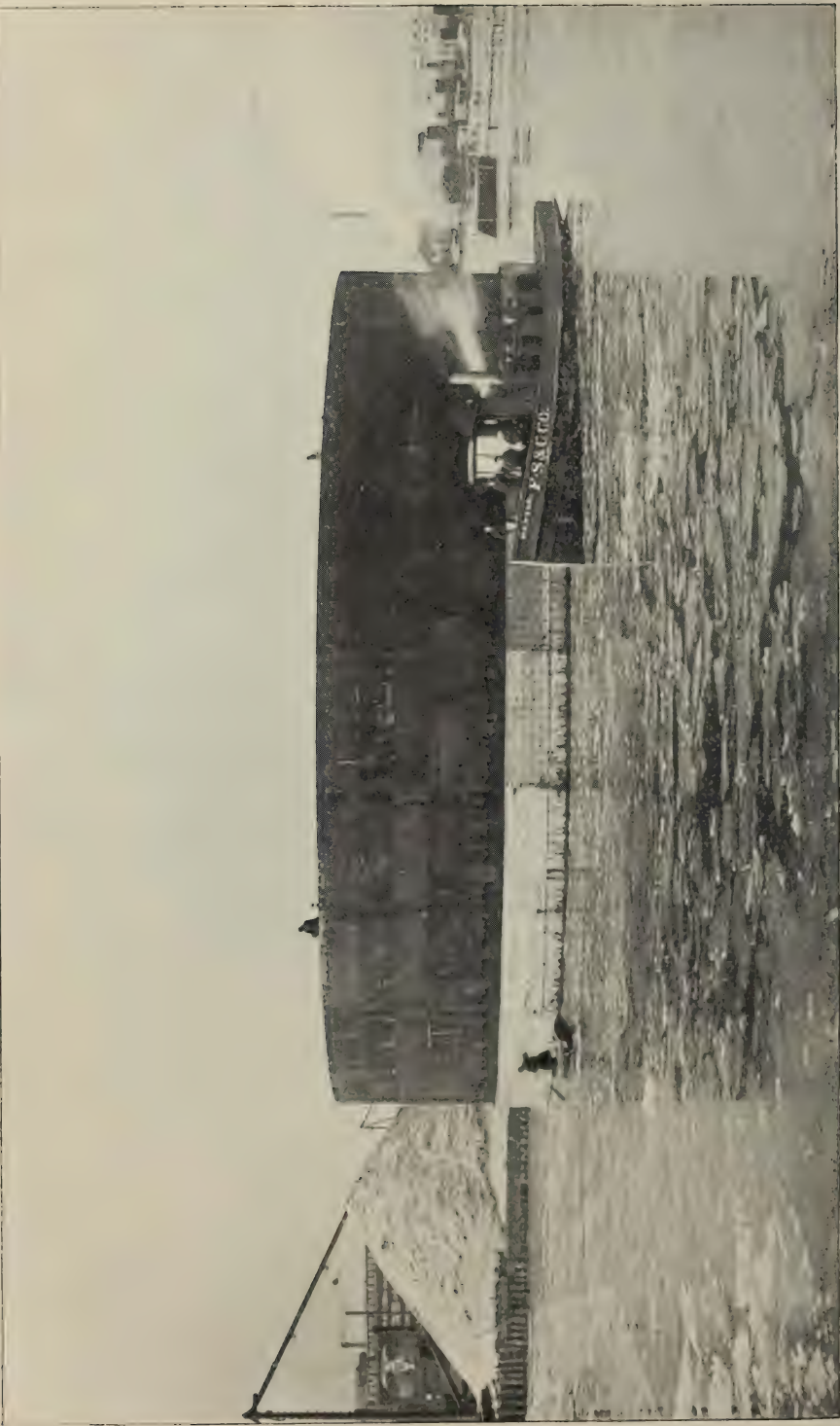
SECTION TWO.

| | |
|---|-------|
| Total number of shafts constructed..... | 3 |
| Total number of feet eight-foot tunnel completed | 9,213 |
| Total number of feet eight-foot rock tunnel excavated (not lined) | 733 |
| Total number of feet eight-foot tunnel remaining | 9,879 |

SECTION THREE.

| | |
|---|---------|
| Total number of shafts constructed..... | 2 |
| Total number of feet eight-foot rock tunnel completed | 1,618.5 |
| Total number of feet eight-foot rock tunnel excavated (not lined) | 2,130 |
| Total number of feet eight-foot tunnel remaining | 18,477 |





NEW INTAKE CRIB
(NORTHEAST LAKE TUNNEL)

NORTHEAST LAKE TUNNEL.

This tunnel, which has an internal diameter of ten feet, extends from the Oak street shaft in a northeasterly direction to a point in Lake Michigan four miles from shore.

The construction of the shaft has already been described under heading "Section 1."

Actual tunneling was commenced October 7th and was continued without interruption during the year.

The soil 1,135 feet nearest the shaft has been a very hard clay. From this point eastward, soft blue swelling clay has been encountered in the roof. This caused more or less trouble and delay. Owing to the great size of the excavation, it has been necessary to timber the roof at all times.

The total progress on this tunnel during the year is 1,280 lineal feet.

NEW INTAKE CRIB.

This crib consists of a circular structure 110 feet 10 inches in diameter. The well has a diameter of sixty feet. There is a solid hemlock timber bottom six feet thick. Over this bottom timber walls extend to a height of nineteen courses or about nineteen feet. The top part of the substructure consists of two concentric steel shells between which Portland cement concrete will be placed.

Work on this crib commenced July 28, 1896. August 19th, when about seven feet high, it was successfully launched.

September 28th, when the structure was completed to a height of about twenty feet, work was discontinued until its final location had been determined upon. Work was again resumed November 18th. At the close of the year the steel shells were about all erected and the riveting well under way.

INTERMEDIATE CRIB.

This crib is the same one that served as a working crib in the construction of the Sixty-eighth street tunnel. The Fitz Simons & Connell Company, to whom was awarded the contract of removing said crib, instead of demolishing same, removed the superstructure and the rip-rap filling, pumped the water out and succeeded in getting the structure afloat. It was then towed to the United States Exterior breakwater where eight additional courses of 12x12 inch timbers

were added. It was then brought out and sunk on the line of the proposed tunnel, about two and a quarter miles from shore, October 25th. Since this time, the superstructure has been completed and the crib made ready for active operations.

The shaft will consist of a steel shell, lined with brick and extending into the solid material in the bed of the lake.

Mr. C. T. Anderson, having been transferred to section two, was in September succeeded by Mr. E. W. Jackson as Assistant Engineer in charge of this work. Mr. H. H. Jackman is his sub-assistant.

SIXTY-EIGHTH STREET TUNNEL EXTENSION.

This work consists of the construction of a seven-foot tunnel between a shaft located on the lake front at the northeast corner of Yates avenue and Sixty-eighth street, and a point under the bed of Lake Michigan 4,915 feet from shore, where it will connect with the west end of the seven-foot tunnel running to the Sixty-eighth street crib, constructed in 1893 and 1894. This tunnel will also connect with the Yates avenue shaft at the Sixty-eighth street pumping station. In order to facilitate and hasten the completion of this improvement, a temporary pile crib and working shaft have been placed on the line of the proposed extension 3,625 feet from shore.

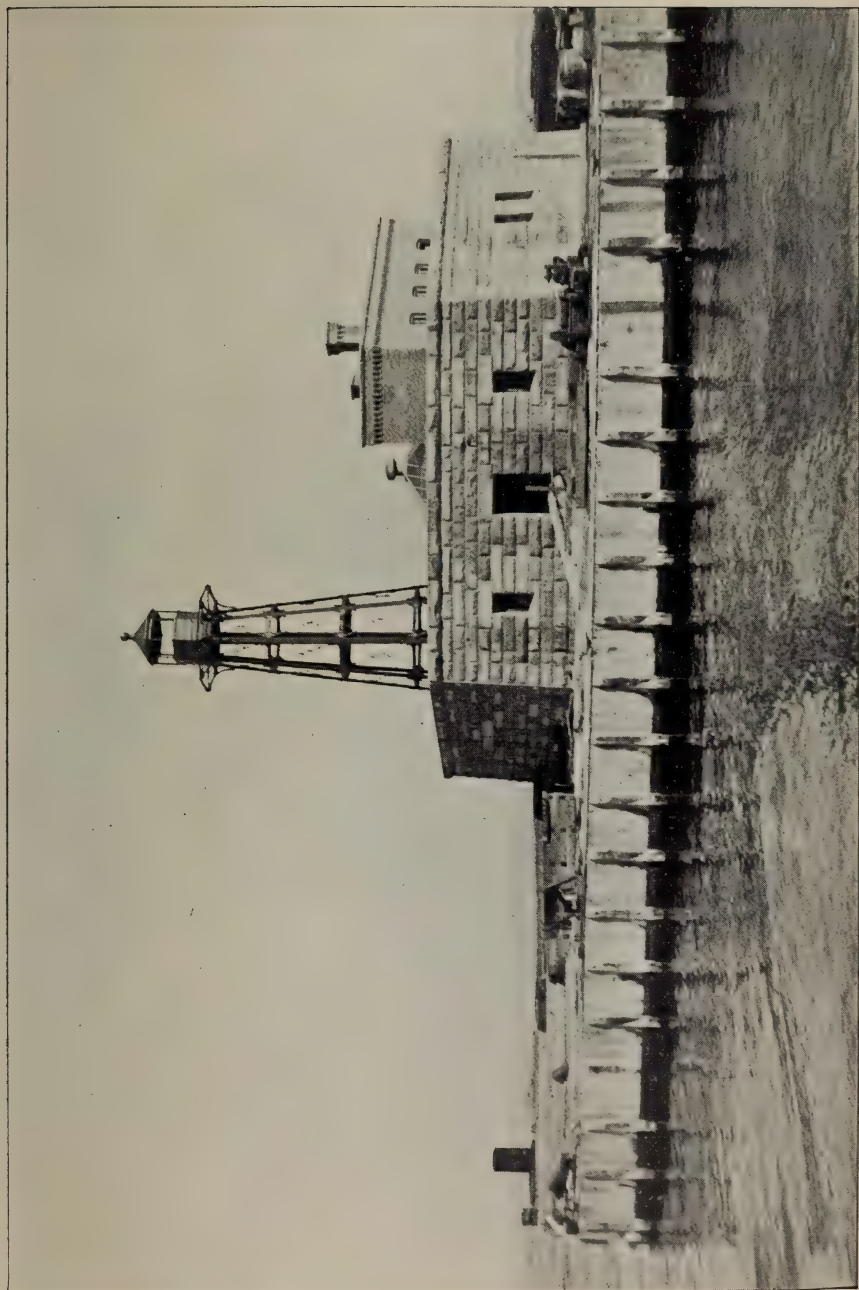
The contract for this work was let September 1, 1896. Actual work on the shore shaft was commenced September 7, 1896. Work on the pile crib was commenced September 20th, but owing to unfavorable weather the crib was not ready for occupancy and work on the shaft not commenced until December 15, 1896.

The progress on this tunnel to the close of the year was as follows:

| | | |
|---|-------|------|
| Drift No. 1, running east from shore shaft... | 2,014 | feet |
| “ 2, “ west “ “ “ ... | 68 | “ |
| “ 3, “ east from lake “ ... | 38 | “ |
| “ 4, “ west “ “ “ ... | 16 | “ |
| Lineal feet of shore shaft constructed..... | 63.6 | “ |
| “ “ lake “ “ | 69.5 | “ |

The ground through which the work has progressed is a very hard, seamy clay and dry loam, with occasional pockets of quicksand. Blasting with dynamite has been resorted to in excavating for the tunnel.

Mr. R. B. Wilcox, Assistant Engineer, is in local charge of this work.



SIXTY-EIGHTH STREET TWO-MILE INTAKE CRIB

SIXTY-EIGHTH STREET PERMANENT CRIB.

The old superstructure of this crib, constructed of wood, commenced to show signs of weakness and dilapidation and a new structure of stone, concrete and iron was planned.

The contract for this work was let June 2, 1896.

The work included the removal of the old superstructure to an elevation of one foot below City datum, the removal of the rip-rap filling to a depth of 3.5 feet below datum, the placing of iron tie rods through the timber walls, the preparation of a suitable foundation and the erection of a permanent structure.

The superstructure, two stories high, consists of an outer wall of oolitic limestone, an inner wall of one course of stone and a 26-inch brick wall, the space between the two walls being filled with Portland cement concrete to the level of the first floor, eight feet above datum. The second floor is supported by steel I beams and arch tiling. On the second floor there is a brick dwelling covering about one-half of the space around the well except a six-foot passage-way between the dwelling and the outer wall of the crib. The dwelling will furnish quarters for the crib-keeper and his assistants. On the first floor there is a boiler room, engine room, machine, coal and storage rooms.

On the northwest side of the crib there is an iron light-house tower and lantern. The light is about 61 feet above datum. The well is covered by an iron truss roof with skylight of American wire glass. All this work, with the exception of some concrete work and plastering on the lower floor and the pointing up of the stone work, was done at the end of the year. This structure, protected by the new breakwater surrounding it, is one of the most substantial intakes in the City.

WATER PIPE EXTENSION.

MR. H. P. THOMPSON, Superintendent.

During the year, 432,602 feet of mains of the following dimensions were laid :

| | |
|-------------------|---------|
| 5,099 feet..... | 4-inch. |
| 295,435 feet..... | 6 " |
| 108,709 feet..... | 8 " |
| 21,308 feet..... | 12 " |
| 31 feet..... | 16 " |
| 2,020 feet..... | 24 " |

Of this amount, 241,493 feet of mains of different sizes have been laid under contract by special assessment, and 83,038 feet of pipe, costing \$77,404.40, have been laid at the expense of private parties. Of this amount, \$15,911.79 were advanced by contractors for street improvements, who have been required to advance the money to cover the cost of laying water pipe, where necessary, before going on with the street improvements. The City agrees to refund all money advanced for water pipe when the annual revenue from it pays 10 cents per foot frontage. During the year, 108,071 feet of different size pipe have been laid on revenue and for circulation.

The following work was done during 1896, which is not included in our report of pipe laid and valves set :

At Lake View pumping station, 620 feet of 36-inch pipe was laid and one 36-inch valve set for temporary supply pipe, while connection was being made between the two cribs, which has since been taken out.

At Chicago avenue pumping station, there were 1,394 feet of 24-inch pipe, 143 feet of 16-inch pipe, two 24-inch valves and two 16-inch valves used in laying drain for the pumping works.

At the Smallpox Hospital, 178 feet of 4-inch pipe were laid and two 4-inch valves set for the private use of the hospital.

Ten hundred and twenty-five brick hydrant and stop valve basins were built during the year and two hundred and twenty-one composition basins were placed during the same period. In the building of basins and repairs, 1,152,000 brick and 3,501 barrels of cement have been used. One fire cistern was built in 1896, at Jefferson and Congress streets.

Water mains have been taken up or abandoned in the following streets and other mains put in:

Atlantic street from Thirty-ninth street to Root street.

Commercial street from Paulina street to Wrightwood avenue.

Crilly place crossing Eugenie street.

Elizabeth street from Fiftieth street to Fifty-first street.

Eugenie street from Sedgwick street to La Salle avenue.

Fletcher street from Racine avenue to Perry street.

Franklin street crossing Eugenie street.

Halsted street from Thirty-ninth street to 463 feet south.

Halsted street from 817 feet south of Thirty-ninth street to 598 feet southward.

Irving Park avenue from Vernon avenue to 300 feet west.
 Jefferson street from Harrison street to Van Buren street.
 Justine street from Forty-ninth street to Fiftieth street.
 Laflin street from Forty-ninth street to Fiftieth street.
 Marshfield avenue from Roscoe street to Lincoln avenue.
 Ohio street from Market street to Wells street.
 Otto street from Ashland avenue to Southport avenue.
 Perry street from Fletcher street to Belmont avenue.
 Snyder street crossing Halsted street.
 Superior street from Clark street to State street.
 Twenty-third place from Oakley avenue to Hoyne avenue.
 Warren avenue from California avenue to Rockwell street.
 Wellington avenue from Lincoln street to Perry street.
 Wisconsin street from Sedgwick street to 584 feet eastward.

Water mains were lowered in the following streets during the year 1896 :

Anthony avenue from South Park avenue to Seventieth street.
 Champlain avenue from Sixty-third street to Sixty-fifth street.
 Champlain avenue from Seventy-first street to Seventy-fifth street.
 Cregier avenue from Sixty-ninth street to Seventy-first street.
 Evans avenue from Sixty-third street to Sixty-fifth street.
 Evans avenue from Seventy-first street to Seventy-fifth street.
 Forty-seventh street from Armour avenue 300 feet westward.
 Fifty-first street from Armour avenue 290 feet westward.
 Fifty-third street from Armour avenue 250 feet westward.
 Fifty-fifth street boulevard from Armour avenue 350 feet westward.
 Fifty-sixth street from Indiana avenue to Prairie avenue.
 Fifty-ninth street from Armour avenue 315 feet westward.
 Langley avenue from Seventy-first street to Seventy-fifth street.
 Sixty-seventh street crossing May street.
 Sixty-seventh street from Oglesby avenue 120 feet eastward.
 Sixty-seventh street from Cottage Grove avenue 2,587 feet westward.
 Sixty-seventh street from Evans avenue 289 feet eastward.
 Sixty-ninth street from South Park avenue to Keefe avenue.
 Seventieth place from St. Lawrence avenue 375 feet eastward.
 Seventy-second place from Illinois Central Railroad 350 feet eastward.
 South Chicago avenue from South Park Avenue to Cottage Grove avenue.

South Chicago avenue from Cottage Grove avenue 1,010 feet eastward.

Storms avenue from Seventy-second street to Seventy-third street.

Vernon avenue from Sixty-ninth street to Seventy-third street.

The accompanying tables show in detail the number of new hydrants and new valves placed, the size and length of pipe laid and name of street and district.

HYDRANTS PLACED IN 1896.

| DIVISION. | 2½-inch Single. | 2½-inch Double. | 4-inch Double. | 2½-inch Double, with one 4-inch Single. | Total. |
|-----------------|--------------------|--------------------|-------------------|---|--------|
| North | | 3 | | | 3 |
| South | | 4 | 1 | | 5 |
| West | 100 | 157 | | | 257 |
| Hyde Park | 60 | 79 | | | 139 |
| Lake View | 32 | 43 | | | 75 |
| Lake | 40 | 91 | | 2 | 133 |
| Jefferson | 67 | 212 | | | 279 |
| Calumet | 14 | 23 | | | 37 |
| Totals | 313 | 612 | 1 | 2 | 928 |

During the year 1896 there were taken out in the North Division two 2½-inch single hydrants, in the South Division three 2½-inch single hydrants, in the West Division three 2½-inch single hydrants, in Hyde Park District one 2½-inch single hydrant, all of which were replaced by 2½-inch double hydrants. Also one 2½-inch double hydrant and one 2½-inch single hydrant in the North Division, one 2½-inch single hydrant in the South Division, two 2½-inch single hydrants in the West Division, four 2½-inch double hydrants in Lake district, were taken out, which were not replaced; also one 2½-inch double hydrant taken out in South Division which was replaced by 4-inch double hydrant.

TOTAL NUMBER OF FIRE HYDRANTS AT THE CLOSE OF 1896.

| DIVISION. | 2½-inch Single. | 2½-inch Double. | 4-inch Double. | 2½-inch Double, with one 4-inch Single. | TOTAL. |
|-----------------|--------------------|--------------------|-------------------|--|--------|
| North | 414 | 507 | 132 | ... | 1,053 |
| South | 795 | 1,024 | 194 | ..... | 2,013 |
| West | 1,595 | 4,051 | 237 | ..... | 5,883 |
| Hyde Park | 391 | 1,744 | 8 | 605 | 2,748 |
| Lake View | 234 | 1,040 | ..... | 1 | 1,275 |
| Lake | 205 | 805 | 2 | 1,596 | 2,608 |
| Jefferson | 172 | 1,045 | 4 | ..... | 1,221 |
| Calumet | 132 | 387 | ..... | 55 | 574 |
| Total | 3,938 | 10,603 | 577 | 2,257 | 17,375 |

STOP-VALVES PUT IN DURING THE YEAR 1896.

| DIVISION. | SIZE OF VALVES. | | | | | | | TOTAL |
|-----------------|-----------------|-------|-------|--------|--------|--------|--------|-------|
| | 4-in. | 6-in. | 8-in. | 12-in. | 16-in. | 24-in. | 36-in. | |
| North ..... | ..... | 5 | 1 | ..... | ..... | ..... | ..... | 6 |
| South ..... | ..... | 2 | 2 | ..... | ..... | ..... | ..... | 4 |
| West | 3 | 143 | 47 | 15 | ..... | 2 | ..... | 210 |
| Hyde Park ..... | ..... | 92 | 38 | 9 | ..... | ..... | ..... | 139 |
| Lake View ..... | ..... | 62 | 7 | ..... | ..... | ..... | ..... | 69 |
| Lake | 7 | 83 | 32 | 3 | ..... | ..... | ..... | 125 |
| Jefferson ..... | ..... | 171 | 98 | 6 | 1 | 4 | ..... | 280 |
| Calumet | 1 | 17 | ..... | 1 | ..... | ..... | ..... | 19 |
| Totals | 11 | 575 | 225 | 34 | 1 | 6 | ..... | 852 |

During the year 1896, there were taken out in the North Division three 4-inch valves, in the West Division three 4-inch valves, in the Lake View District nine 4-inch valves, in Lake District two 4-inch valves, in Jefferson District one 12-inch valve, which were not replaced.

TOTAL NUMBER AND SIZE OF VALVES IN USE AT THE CLOSE
OF 1896.

| DIVISION. | SIZE OF VALVES. | | | | | | | | | | | TOTAL | |
|-----------------|-----------------|---------|---------|---------|----------|----------|----------|----------|----------|----------|----------|-------|----------|
| | 3-inch. | 4-inch. | 6-inch. | 8-inch. | 10-inch. | 12-inch. | 14-inch. | 16-inch. | 18-inch. | 20-inch. | 24-inch. | | 36-inch. |
| North | | 161 | 428 | 294 | .... | 32 | ... | 13 | .... | .... | 12 | 3 | 943 |
| South | | 155 | 682 | 657 | .... | 85 | .... | 25 | ... | .... | 29 | 13 | 1,646 |
| West | | 583 | 2,306 | 1,205 | .... | 282 | .... | 72 | .... | .... | 33 | 11 | 4,492 |
| Hyde Park | | 93 | 1,078 | 276 | 20 | 80 | 4 | 49 | .... | 1 | 21 | 6 | 1,628 |
| Lake View | 1 | 248 | 721 | 154 | .... | 31 | 3 | 5 | .... | 3 | 5 | 4 | 1,175 |
| Lake | | 131 | 1,112 | 335 | 2 | 69 | 14 | 13 | 2 | .... | 18 | 2 | 1,698 |
| Jefferson | | 22 | 594 | 322 | .... | 66 | .... | 9 | .... | ... | 28 | .... | 1,041 |
| Calumet | | 4 | 201 | 67 | .... | 9 | .... | 2 | .... | .. | 1 | .... | 284 |
| Totals | 1 | 1,397 | 7,122 | 3,310 | 22 | 654 | 21 | 188 | 2 | 4 | 147 | 39 | 12,907 |

WORK IN DETAIL.

The following tables show in detail the work of water-pipe extensions :

NORTH DIVISION.

| STREET | FROM | TO | Length of Pipe in feet | Diameter in inches |
|--|---------------------|----------------------|---------------------------------|-----------------------|
| Crilly place | Connecting | Eugenie | 21 | 6 |
| Eugenie | Sedgwick | La Salle avenue..... | 1,444 | 6 |
| Franklin | Crossing | Eugenie | 66 | 6 |
| Hammond | Connecting | Wisconsin | 38 | 6 |
| *Huber | Racine avenue | Herndon | 617 | 6 |
| Ohio | Franklin | Market | 327 | 6 |
| Ohio | Wells | Franklin | 333 | 6 |
| Superior | Clark | State | 695 | 6 |
| Wisconsin | Sedgwick | Eastward | 584 | 8 |
| Total | | | 4,125 | 6 |
| Add Branch Pipe for Hydrants | | | 36 | |
| Total feet of pipe laid in North Division..... | | | 4,161 | |

*Laid by Deposit.

SOUTH DIVISION.

| STREET | FROM | TO | Length of Pipe in feet | Diameter in inches |
|---|---------------------------------|---------------------|---------------------------------|-----------------------|
| †Thirty-seventh | Gage..... | Laurel | 434 | 6 |
| Vermont..... | 325 feet S. of Thirty-seventh.. | Thirty-eighth | 270 | 6 |
| Total | | | 704 | 6 |
| Add Branch Pipe for Hydrants | | | 48 | |
| Total feet of pipe laid in South Division | | | 752 | |

†Laid by Special Assessment.

WEST DIVISION.

| STREET | FROM | TO | Length of Pipe in feet | Diameter in inches |
|-------------------------------|------------------------------------|--|---------------------------------|--------------------------|
| Adams | Crossing | Fortieth avenue | 18 | 6 |
| †Adams | S. Forty-sixth avenue | Forty-seventh avenue | 663 | 6 |
| †Albany avenue | Huron | Chicago avenue | 680 | 6 |
| *Ambrose | California avenue..... | Washtenaw avenue | 656 | 6 |
| †Augusta | N. Forty-second ave. | N. Forty-sixth avenue | 2,650 | 8 |
| *Avers avenue..... | W. Twelfth | W. Fourteenth | 1,294 | 6 |
| †Avers avenue..... | W. Sixteenth. | W. Nineteenth | 1,464 | 6 |
| †Beach avenue | Homan avenue..... | Spaulding avenue..... | 624 | 6 |
| †Carroll avenue..... | 180 ft. W. of Sacramento ave. | Albany avenue | 434 | 6 |
| †Chicago avenue | N. Forty-seventh ave. | N. Forty-eighth ave. | 588 | 8 |
| †Chicago avenue | N. Fortieth avenue | N. Forty-fourth ave. | 2,633 | 12 |
| †Christiana avenue | Division | Southward | 37 | 6 |
| †Collins | Albany avenue | Kedzie avenue | 584 | 6 |
| †Colorado avenue..... | S. Fortieth avenue | S. Forty-third avenue | 1,613 | 8 |
| †Congress | Crossing | Jefferson | 48 | 6 |
| †W. Congress | Trumbull avenue | 81 feet E. of Central Park ave. | 1,025 | 6 |
| †W. Congress | Trumbull avenue..... | Homan avenue | 261 | 6 |
| *W. Congress | S. Forty-fifth court | Westward | 140 | 6 |
| W. Congress | Crossing | S. Fortieth avenue..... | 39 | 6 |
| †W. S. Congress park | Harrison | Van Buren | 756 | 4 |
| †E. S. Congress park | Harrison | Congress | 380 | 4 |
| †Cornelia | N. Forty-second ave. | N. Forty-fourth ave. | 1,343 | 6 |
| †Cortez | N. Forty-second ave. | N. Forty-sixth avenue | 2,690 | 6 |
| †Crystal | N. Fortieth avenue | N. Forty-second ave. | 1,298 | 6 |
| †W. Division..... | Hamlin avenue | Grand avenue | 905 | 12 |
| W. Division..... | Christiana avenue | Eastward | 720 | 12 |
| †W. Division..... | N. Fortieth avenue | N. Forty-sixth avenue | 3,984 | 12 |
| †Eighteenth | Western avenue | 98 feet W. of Campbell avenue | 648 | 6 |
| †Erie | N. Fiftieth avenue..... | 283 ft. E. of N. Fiftieth avenue | 303 | 6 |
| †Evergreen | Kedzie avenue..... | Homan avenue..... | 1,259 | 6 |
| *Fall | Warren avenue | Madison | 327 | 6 |
| Filmore | S. Forty-first avenue | S. Forty-second ave. | 686 | 6 |
| †Fleetwood avenue..... | North avenue | 195 ft. E. of Blanche. | 382 | 6 |
| Flournoy | Lawndale avenue | Eastward | 24 | 6 |
| Flournoy | S. Forty-third avenue | Westward | 285 | 6 |
| †S. Fortieth place | W. Twenty-sixth | W. Thirty-first | 2,641 | 6 |
| †S. Fortieth place | W. Sixteenth. | Southward | 398 | 6 |
| N. Fortieth place | Prince | Northward | 289 | 6 |
| S. Fortieth avenue..... | Ogden avenue..... | Twenty-second | 275 | 8 |
| †S. Fortieth avenue..... | Twenty-sixth | Twenty-seventh | 592 | 8 |
| †S. Forty-first avenue | Twenty-sixth | Thirtieth | 2,010 | 6 |
| S. Forty-first avenue | Sixteenth | Southward | 379 | 6 |
| †S. Forty-first avenue | Harvard | Lexington | 669 | 6 |
| †S. Forty-first avenue | Colorado avenue..... | Southward | 180 | 6 |
| S. Forty-first avenue | Crystal | Potomac | 325 | 6 |
| †S. Forty-first court | Colorado avenue..... | Southward | 140 | 6 |
| †S. Forty-first court..... | W. Twenty-sixth | W. Twenty-eighth..... | 641 | 6 |
| S. Forty-first court..... | W. Twenty-eighth..... | W. Twenty-ninth..... | 676 | 6 |
| †N. Forty-second court..... | Chicago avenue | Iowa | 660 | 6 |
| †N. Forty-second avenue | Chicago avenue | Augusta | 1,360 | 8 |
| *S. Forty-second avenue | Park avenue | Lake | 311 | 8 |
| S. Forty-second avenue | Crossing | Lake | 67 | 8 |
| *S. Forty-second avenue | Randolph | Northward | 125 | 8 |
| S. Forty-second avenue | Crossing | Randolph | 160 | 8 |
| *S. Forty-second avenue | Randolph | Washington boulevard | 350 | 8 |

WEST DIVISION—CONTINUED.

| STREET | FROM | TO | Length of Pipe in feet | Diameter in inches |
|----------------------------|-------------------------|--------------------------|---------------------------------|--------------------------|
| *S. Forty-second avenue... | Washington boulevard. | Madison | 369 | 8 |
| *S. Forty-second avenue... | Madison | Monroe | 260 | 6 |
| *S. Forty-second avenue... | Monroe | Wilcox avenue | 259 | 6 |
| *S. Forty-second avenue... | Wilcox avenue | Adams | 260 | 6 |
| *S. Forty-second avenue... | Adams | Jackson | 259 | 6 |
| S. Forty-second avenue... | Crossing | Jackson | 66 | 6 |
| *S. Forty-second avenue... | Jackson | Gladys avenue | 264 | 6 |
| S. Forty-second avenue... | Crossing | Gladys avenue | 70 | 6 |
| *S. Forty-second avenue... | Gladys avenue | Van Buren | 266 | 6 |
| *S. Forty-second avenue... | Van Buren | Congress | 330 | 6 |
| S. Forty-second avenue... | Crossing | Congress | 69 | 6 |
| *S. Forty-second avenue... | Congress | Harrison | 264 | 6 |
| S. Forty-second avenue... | Crossing | Harrison | 33 | 6 |
| †S. Forty-second avenue... | Sixteenth | Eighteenth | 646 | 6 |
| S. Forty-second avenue... | Crossing | Twenty-second | 157 | 6 |
| †S. Forty-second avenue... | Twenty-ninth | Thirty-first | 1,288 | 6 |
| S. Forty-third avenue... | Crossing | Gladys avenue | 44 | 6 |
| †N. Forty-third court... | Chicago avenue | Iowa | 660 | 6 |
| †N. Forty-third avenue... | Chicago avenue .. | Augusta | 1,368 | 6 |
| †N. Forty-third avenue... | Augusta | Division | 1,304 | 6 |
| †N. Forty-third avenue... | Hirsch | North avenue | 1,325 | 6 |
| S. Forty-third avenue... | Crossing | Congress | 28 | 6 |
| S. Forty-third avenue... | Crossing | Twenty-second | 26 | 6 |
| †S. Forty-fourth court... | Fifteenth | Sixteenth | 639 | 6 |
| †N. Forty-fourth avenue... | Chicago avenue | Augusta | 1,374 | 8 |
| S. Forty-fourth avenue... | Crossing | Congress | 48 | 8 |
| S. Forty-fourth avenue... | Crossing | Gladys avenue | 26 | 8 |
| S. Forty-fifth avenue... | Crossing | Gladys avenue | 70 | 6 |
| S. Forty-fifth avenue... | Crossing | Congress | 24 | 6 |
| S. Forty-fifth court... | Crossing | Van Buren | 51 | 6 |
| S. Forty-fifth court... | Crossing | Congress | 44 | 6 |
| S. Forty-fifth court... | Crossing | Gladys avenue | 70 | 6 |
| S. Forty-sixth avenue... | Crossing | Adams | 118 | 6 |
| N. Forty-eighth avenue... | Superior | Chicago avenue | 327 | 8 |
| N. Fifty-first court... | Chicago avenue | Southward | 1,046 | 6 |
| *Francisco | Van Buren | Congress | 320 | 6 |
| *Gladys avenue... | S. Forty-second ave. | S. Forty-third avenue. | 664 | 6 |
| *Gladys avenue... | S. Forty-fifth avenue. | S. Forty-fifth court .. | 456 | 6 |
| Gladys avenue... | Crossing | S. Forty-second ave... | 41 | 6 |
| Gladys avenue... | Crossing | S. Fortieth avenue .. | 37 | 6 |
| †Hadden avenue | N. Forty-second ave. | N. Forty-sixth avenue. | 2,624 | 6 |
| †Hamlin avenue | Potomac avenue | Hirsch | 688 | 8 |
| †Hamlin avenue | Prince street | Frederick street | 660 | 8 |
| Hamlin avenue | Chicago avenue | Northward | 290 | 8 |
| Harding avenue | Dorr place | Southward | 325 | 6 |
| *Harding avenue | Twelfth | Fourteenth | 1,288 | 6 |
| †Harrison | S. Forty-third avenue.. | S. Forty-fourth avenue | 590 | 8 |
| Harrison | Crossing | S. Forty-second avenue | 48 | 8 |
| Harvard | Crossing | Lawndale avenue | 6 | 8 |
| Harvard | Crossing | S. Forty-second avenue | 33 | 6 |
| †Harvard | S. Fortieth avenue... | S. Forty-first avenue .. | 640 | 6 |
| Howley avenue | Crossing | Twenty-second | 25 | 6 |
| †Hirsch | Kedzie avenue | Westward | 198 | 8 |
| Homan avenue | Crossing | Flournoy | 72 | 8 |
| †Huron | Sawyer avenue | Homan avenue | 1,029 | 6 |

WEST DIVISION—CONTINUED.

| STREET | FROM | TO | Length of Pipe in feet | Diameter in inches |
|--------------------------|-----------------------------------|----------------------------|---------------------------------|--------------------------|
| †Huron..... | Trumbull avenue..... | St. Louis avenue..... | 291 | 6 |
| Indiana..... | Crossing..... | N. Fortieth avenue..... | 31 | 6 |
| †Iowa..... | N. Forty-second ave.. | N. Forty-fourth avenue | 1,344 | 6 |
| Jackson..... | Crossing..... | Hamlin avenue..... | 40 | 6 |
| Jackson..... | Crossing..... | S. Fortieth avenue..... | 18 | 6 |
| Jefferson..... | Van Buren..... | Harrison..... | 897 | 8 |
| Kellogg avenue..... | Crossing..... | Twenty-second..... | 29 | 6 |
| †Lawndale avenue..... | Augusta..... | Division..... | 1,348 | 6 |
| †Lawndale avenue..... | Harrison..... | Taylor..... | 1,658 | 6 |
| †Lawndale avenue..... | Indiana..... | Ohio..... | 615 | 6 |
| †Le Moyne avenue..... | Kedzie avenue..... | Spaulding avenue..... | 621 | 6 |
| Lexington..... | Connecting..... | Lawndale avenue..... | 26 | 6 |
| Lexington..... | Crossing..... | S. Forty-first avenue.. | 30 | 6 |
| †Lexington..... | Kedzie avenue..... | Central Park avenue... | 2,585 | 6 |
| †Lydia..... | Union..... | Halsted..... | 413 | 6 |
| †Millard avenue..... | Douglas Park blvd.... | Sixteenth..... | 1,244 | 6 |
| Milwaukee avenue..... | Crossing..... | Wood..... | 9 | 8 |
| Milwaukee avenue..... | Crossing..... | Lincoln..... | 2 | 6 |
| Milwaukee avenue..... | Crossing..... | Evergreen avenue..... | 11 | 6 |
| Milwaukee avenue..... | Crossing..... | Fontenoy..... | 7 | 6 |
| Milwaukee avenue..... | Wood..... | Robey..... | 2,184 | 12 |
| †Monticello avenue..... | North avenue..... | 294 feet N. of Le Moyne... | 288 | 6 |
| Monticello avenue..... | Prince street..... | Northward..... | 312 | 6 |
| Monroe..... | S. Fortieth avenue..... | Westward..... | 37 | 6 |
| †Moore..... | Robey..... | Lincoln..... | 617 | 6 |
| Polk..... | Crossing..... | Lawndale avenue..... | 24 | 6 |
| Potomac avenue..... | N. Forty-first avenue. | N. Forty-second ave.. | 643 | 6 |
| Randolph, N. S..... | Crossing..... | S. Forty-second ave.. | 70 | 6 |
| Randolph, S. S..... | Crossing..... | S. Forty-second ave.. | 70 | 6 |
| Ridgeway avenue..... | Chicago avenue..... | Huron..... | 670 | 6 |
| Robey..... | Connecting..... | Milwaukee avenue.... | 8 | 8 |
| †Sawyer avenue..... | Ohio..... | Huron..... | 629 | 6 |
| †Sawyer avenue..... | 292 ft. N. of Huron... | Chicago avenue..... | 295 | 6 |
| †Sawyer avenue..... | Kinzie..... | Central Park blvd.... | 519 | 6 |
| †Sixteenth..... | S. Forty-fourth court.. | S. Forty-fourth avenue | 333 | 8 |
| Sixteenth..... | S. Fortieth avenue..... | S. Fortieth court..... | 361 | 8 |
| Spaulding avenue..... | W. Twenty-sixth..... | W. Twenty-seventh.... | 671 | 8 |
| †Spaulding avenue..... | W. Twenty-seventh.... | W. Thirtieth..... | 1,282 | 8 |
| Spaulding avenue..... | Crossing..... | Flournoy..... | 72 | 6 |
| †Spaulding avenue..... | Grand avenue..... | Hirsch..... | 2,528 | 6 |
| †Springfield avenue..... | Sixteenth..... | Nineteenth..... | 1,391 | 6 |
| †Springfield avenue..... | Grand avenue..... | North avenue..... | 1,267 | 8 |
| *Springfield avenue..... | Twelfth..... | Fourteenth..... | 1,281 | 6 |
| St. Louis avenue..... | Crossing..... | Congress..... | 74 | 6 |
| St. Louis avenue..... | Crossing..... | Flournoy..... | 75 | 8 |
| *St. Louis avenue..... | Twenty-fourth..... | Twenty-sixth..... | 1,566 | 8 |
| †Taylor..... | Campbell avenue..... | Rockwell..... | 750 | 6 |
| Taylor..... | Connecting..... | Lawndale avenue..... | 6 | 6 |
| Taylor..... | 451 ft. E. of S. Forty-second ave | Eastward..... | 234 | 6 |
| Taylor..... | S. Forty-second ave.. | Eastward..... | 451 | 6 |
| †Thomas..... | N. Forty-second ave.. | N. Forty-sixth avenue. | 2,624 | 6 |
| Thomas..... | Crossing..... | Barclay..... | 66 | 6 |
| †Turner avenue..... | Twenty-fifth..... | Twenty-sixth..... | 657 | 6 |
| †Trumbull avenue..... | Central Park blvd.... | Governor's parkway.. | 495 | 6 |
| †Troy..... | 375 ft. S. of Nineteenth.... | Twenty-first..... | 263 | 6 |

WEST DIVISION—CONTINUED.

| STREET | FROM | TO | Length of Pipe in feet | Diameter in inches |
|--|----------------------------------|----------------------------|---------------------------------|--------------------------|
| Troy | Nineteenth | Southward | 375 | 6 |
| Trumbull avenue | Twenty-seventh | Twenty-ninth | 1,347 | 8 |
| *Twenty-second place | Oakley avenue | Western avenue | 600 | 6 |
| Twenty-second, N. S. | Connecting | S. Fortieth avenue | 29 | 6 |
| Twenty-second, S. S. | Connecting | S. Fortieth avenue | 28 | 6 |
| Twenty-third place | Oakley avenue | Hoyne avenue | 1,336 | 6 |
| Twenty-fourth | Crossing | St. Louis avenue | 72 | 6 |
| †Twenty-fifth | S. Fortieth avenue | S. Fortieth court | 369 | 6 |
| Twenty-fifth | S. Fortieth court | Westward | 212 | 6 |
| Twenty-fifth | Crossing | St. Louis avenue | 72 | 6 |
| †Twenty-sixth | S. Fortieth avenue | S. Forty-second ave | 1,313 | 8 |
| *Thirty-first | S. Forty-first court | Belt Line R. R. | 2,885 | 8 |
| Thirty-sixth | Crossing | Lincoln | 48 | 6 |
| Van Buren | Connecting | S. Fortieth avenue | 35 | 6 |
| †Van Buren | 200 ft. E. of S. Forty-third ave | S. Forty-fifth court | 2,059 | 6 |
| Warren avenue | California avenue | Rockwell | 1,262 | 6 |
| Wilcox avenue | Connecting | S. Fortieth avenue | 37 | 6 |
| Wood | Connecting | Milwaukee avenue | 5 | 8 |
| Total | | | 113,191 | |
| Add Branch Pipe for Hydrants | | | 1,200 | 4 |
| Add Branch Pipe for Hydrants | | | 1,884 | 6 |
| Total feet of pipe laid in West Division | | | 116,275 | |

*Laid by Deposit.

†Laid by Special Assessment.

HYDE PARK DISTRICT.

| STREET | FROM | TO | Length of Pipe in feet | Diameter in inches |
|------------------------------|-------------------------------|--------------------------|---------------------------------|--------------------------|
| Alley E. of Grand boul. . . | 135 ft. S. of Forty-ninth | Fiftieth | 488 | 6 |
| Alley N. of Fifty-second. . | Drexel avenue | Westward | 288 | 6 |
| Avenue H. | 285 ft. N. of 106th. . . | 107th | 953 | 6 |
| Avenue J. | 106th | 148 ft. S. of 109th. . . | 2,184 | 6 |
| † Avenue L. | Ninety-fifth | Ninety-seventh. | 1,268 | 6 |
| † Avenue L. | Ninety-eighth | 100th | 1,394 | 6 |
| † Avenue L. | 101st. | 103d | 1,421 | 6 |
| † Avenue L. | 104th | 105th | 643 | 6 |
| Bond avenue. | Illinois avenue | Eighty-third place. . . | 550 | 6 |
| * Burnside avenue. | Ninety-third | Calumet avenue. | 1,270 | 6 |
| Calumet avenue | Crossing. | Fifty-sixth | 42 | 6 |
| * Calumet avenue | Ninety-fifth | Burnside avenue | 2,035 | 6 |
| Champlain avenue. | Ninety-fifth. | Burnside avenue. | 675 | 6 |
| † Colfax avenue. | Seventy-ninth | Eighty-first | 1,302 | 8 |
| Curtis avenue | 257 ft. N. of 114th pl. | Northward | 150 | 6 |
| Drexel avenue. | Connecting | Fifty-ninth | 46 | 6 |
| Drexel avenue. | Connecting | Seventy-first | 6 | 6 |
| Edwards avenue. | Connecting | Railroad avenue. | 30 | 6 |
| Eighty-first place. | Woodlawn avenue. . . . | Westward | 525 | 6 |
| Eighty-fifth. | Cottage Grove avenue. . | Jackson avenue | 334 | 8 |
| † Eighty-ninth. | Manistee avenue | Muskegon avenue | 377 | 6 |
| Ellis avenue | Connecting | Fifty-ninth | 39 | 6 |
| Ellis avenue | Connecting | Seventy-first | 24 | 6 |
| † Ellis avenue | Seventy-fourth | Seventy-fifth | 656 | 6 |
| † Escanaba avenue | Ninety-sixth | Ninety-seventh. | 616 | 6 |
| † Evans avenue | Forty-ninth | Fiftieth | 668 | 6 |
| Forty-ninth | Crossing. | Kimbark avenue | 66 | 6 |
| Fiftieth. | Indiana avenue. | Prairie avenue | 408 | 6 |
| † Fiftieth. | Grand boulevard | Eastward | 209 | 6 |
| † Fiftieth. | Champlain avenue. . . . | Vincennes avenue | 885 | 6 |
| Fifty third. | Crossing | Indiana avenue. | 102 | 6 |
| Fifty-fourth | Indiana avenue. | Eastward | 180 | 6 |
| Fifty-sixth | Kimbark avenue | Monroe avenue. | 444 | 6 |
| * Fifty-sixth | Wabash avenue | Indiana avenue. | 756 | 6 |
| * Fifty-sixth | S. Park avenue. | Prairie avenue. | 902 | 6 |
| † Fifty-ninth. | Cottage Grove avenue. . | Rosalie court. | 4,709 | 12 |
| † Fifty-ninth. | Stony Island avenue . . . | Rosalie court. | 643 | 12 |
| Greenwood avenue | Seventy-third | S. Chicago avenue. . . . | 650 | 6 |
| Hope avenue. | Sixty-second | Southward | 228 | 6 |
| Indiana avenue | 225 feet N. of 114th pl. | Northward | 216 | 6 |
| * Indiana avenue | 116th | Southward | 200 | 6 |
| Ingleside avenue | Connecting | Fifty-ninth | 42 | 6 |
| Ingleside avenue | Connecting | Seventy-first | 26 | 6 |
| † Ingleside avenue | 155 feet N. of Seventy-fourth | P., Ft. W. & C. Ry. . . | 218 | 6 |
| Jackson avenue. | Connecting | Fifty-ninth | 46 | 6 |
| Jackson avenue. | Eighty-fifth | Eighty-sixth | 641 | 6 |
| † Jeffrey avenue | Seventieth. | Seventy-first | 668 | 8 |
| † Jeffrey avenue. | Seventy-fifth | Seventy-ninth. | 2,682 | 8 |
| Juniata avenue | Ninety-second place . . . | Ninety-third | 329 | 8 |
| * Kimbark avenue | Forty-ninth. | Fiftieth | 624 | 6 |
| Kimbark avenue | Crossing. | Forty-ninth | 46 | 6 |
| Kimbark avenue | Connecting | Fifty-ninth | 45 | 6 |
| Lexington avenue | Connecting | Fifty-ninth | 46 | 6 |
| † Luella avenue | Seventy-fifth | Seventy-seventh. | 1,322 | 6 |
| Madison avenue | Connecting | Fifty-ninth | 42 | 6 |

HYDE PARK DISTRICT—CONTINUED.

| STREET | FROM | TO | Length of Pipe in feet | Diameter in inches |
|----------------------------|------------------------------|-------------------------|---------------------------------|--------------------------|
| McFarlane avenue | Ninety-second place .. | Ninety-third | 333 | 8 |
| †Michigan avenue | Seventy-first | Seventy-fifth | 2,562 | 6 |
| †Michigan avenue | Ninety-ninth | Ninety-ninth place .. | 349 | 6 |
| Michigan avenue | Ninety-ninth place .. | 100th place | 599 | 6 |
| Muskegon avenue | Eighty-second | Southward | 328 | 6 |
| †Muskegon avenue | 103d | 104th | 703 | 8 |
| Monroe avenue | Connecting | Fifty-ninth | 45 | 6 |
| Monroe avenue | Seventieth | Northward | 913 | 6 |
| Ninety-second place | Juniata avenue | Clark avenue | 582 | 6 |
| Ninety-second place | McFarlane avenue | Westward | 417 | 6 |
| *Ninety-third | C. W. I. R. R. | S. Park avenue | 1,349 | 8 |
| *Ninety-fifth | S. Park avenue | Indiana avenue | 1,254 | 8 |
| Ninety-ninth | Connecting | Michigan avenue | 50 | 12 |
| Nutt avenue | Seventy-fifth | S. Chicago avenue | 548 | 6 |
| 103d | Avenue C | Avenue M | 2,658 | 8 |
| †103d | Muskegon avenue | Notre Dame avenue .. | 552 | 8 |
| 104th | Connecting | Muskegon avenue | 39 | 8 |
| 106th | Ewing avenue | Avenue H | 661 | 6 |
| †109th | Calhoun avenue | Bensley avenue | 310 | 8 |
| †Prairie avenue | Sixty-first | Sixty-third | 1,329 | 6 |
| Prairie avenue | Crossing | Fifty-sixth | 72 | 6 |
| Prairie avenue | Crossing | Sixtieth | 80 | 6 |
| Railroad avenue | Seventy-eighth | Edwards avenue | 218 | 6 |
| Rhodes avenue | Seventy-second | Southward | 474 | 6 |
| Rosalie court | Connecting | Fifty-ninth | 26 | 6 |
| Ross avenue | 580 ft. E. of Indiana avenue | Eastward | 351 | 6 |
| †Saginaw avenue | Seventy-ninth | Eighty-first | 1,302 | 6 |
| †Sixty-first | S. Park avenue | State | 2,640 | 8 |
| Sixty-second | Lexington avenue | Greenwood avenue | 446 | 6 |
| †Sixty-third place | Jackson avenue | Eastward | 295 | 6 |
| Sixty-fourth | Crossing | S. Park avenue | 72 | 6 |
| Sixty-fourth | Crossing | Champlain avenue | 68 | 6 |
| Sixty-fourth | Crossing | Evans avenue | 72 | 6 |
| Sixty-fourth | Crossing | Vernon avenue | 72 | 6 |
| Sixty-fifth | Crossing | Champlain avenue | 68 | 6 |
| Sixty-fifth | Crossing | Evans avenue | 72 | 6 |
| Sixty-fifth | Crossing | S. Park avenue | 72 | 6 |
| Sixty-fifth | Crossing | Vernon avenue | 72 | 6 |
| Sixty-sixth | Crossing | Champlain avenue | 68 | 6 |
| Sixty-sixth | Crossing | Evans avenue | 72 | 6 |
| Sixty-sixth | Crossing | S. Park avenue | 72 | 6 |
| Sixty-sixth | Crossing | Vernon avenue | 72 | 6 |
| Sixty-eighth | Crossing | Madison avenue | 84 | 6 |
| Sixty-eighth | Connecting | State | 33 | 6 |
| Sixty-eighth | Crossing | Wabash avenue | 100 | 6 |
| Sixty-ninth | S. Park avenue | Calumet avenue | 443 | 6 |
| Seventieth | Connecting | Monroe avenue | 32 | 6 |
| Seventieth | Crossing | Vernon avenue | 72 | 6 |
| Seventieth | Crossing | Wabash avenue | 100 | 6 |
| †Seventy-first place | Woodlawn avenue | I. C. R. R. | 421 | 6 |
| Seventy-first | Drexel avenue | Dobson avenue | 1,006 | 6 |
| Seventy-first | Cottage Grove avenue. | Eastward | 390 | 6 |
| Seventy-second | Crossing | Vernon avenue | 72 | 6 |
| Seventy-third | Woodlawn avenue | Eastward | 241 | 6 |
| †Seventy-fourth | Ellis avenue | Drexel avenue | 664 | 6 |

HYDE PARK DISTRICT—CONTINUED.

| STREET | FROM | TO | Length of Pipe in feet | Diameter in inches |
|--|-----------------------|-----------------------|---------------------------------|-----------------------|
| Seventy-fourth | Crossing..... | Woodlawn avenue.... | 56 | 6 |
| Seventy-fourth | Connecting..... | State..... | 33 | 6 |
| Seventy-fourth | Crossing..... | Nutt avenue | 72 | 6 |
| Seventy-fourth | Crossing..... | Brooks avenue | 72 | 6 |
| Seventy-fourth | Crossing..... | Madison avenue.... | 74 | 6 |
| Seventy-fourth | Crossing..... | Adams avenue | 72 | 6 |
| Seventy-fifth | Cottage Grove avenue. | Drexel avenue | 693 | 6 |
| Seventy-sixth place... | Railroad avenue..... | Coles avenue..... | 469 | 6 |
| Seventy-eighth place... | Railroad avenue..... | Coles avenue..... | 472 | 6 |
| Seventy-eighth..... | Reynolds avenue | Railroad avenue..... | 274 | 6 |
| †Seventy-ninth..... | Colfax avenue..... | Marquette avenue ... | 670 | 12 |
| *S. Park avenue..... | Ninety-third | Burnside avenue | 489 | 8 |
| S. Park avenue..... | Crossing..... | Sixty-third | 76 | 8 |
| *S. Park avenue..... | Sixty-first | Sixty-third | 1,262 | 8 |
| State | Crossing..... | Seventy-fifth..... | 84 | 8 |
| †Vernon avenue | Sixty-third..... | Sixty-sixth | 2,043 | 6 |
| Vincennes avenue | Crossing..... | Sixty-seventh | 56 | 6 |
| Washington avenue.... | Connecting | Fifty-ninth..... | 36 | 6 |
| †Woodlawn avenue | Seventy-fourth | S. Chicago avenue.... | 600 | 6 |
| Total | | | 68,957 | 4 |
| Add Branch Pipe for Hydrants | | | 720 | |
| Add Branch Pipe for Hydrants | | | 948 | |
| Total feet of pipe laid in Hyde Park District..... | | | 70,625 | |

*Laid by Deposit.

†Laid by Special Assessment.

LAKE VIEW DISTRICT.

| STREET | FROM | TO | Length of Pipe in feet | Diameter in inches |
|-----------------------------------|--------------------------------|-------------------------|---------------------------------|-----------------------|
| Alley E. of E. Ravenswood Park... | Cosgrove avenue | Southward | 240 | 6 |
| †Ashland avenue | 75 ft. N. of Winona .. | Foster avenue | 246 | 6 |
| †Argyle | Evanston avenue | 575 feet E. of Clark .. | 1,635 | 8 |
| †Balmoral avenue | Southport avenue | Clark | 941 | 8 |
| Berteau avenue | W. Ravenswood Park .. | Eastward | 256 | 8 |
| *Berwyn avenue | Oakley avenue | Irving avenue | 3 1 | 6 |
| Bradley place | Connecting | Robey | 43 | 6 |
| *Bradley place | Robey | Hoyne | 606 | 6 |
| *Castlewood terrace | Sheridan road | Eastward | 1,100 | 6 |
| Center | Connecting | Southport avenue | 66 | 6 |
| Commercial avenue | Paulina | Wrightwood avenue .. | 1,016 | 6 |
| *Commonwealth avenue .. | Surf | Diversey avenue | 514 | 6 |
| Cornelia | W. Ravenswood Park .. | Eastward | 136 | 6 |
| *Cornelia | Sheffield avenue | Wilton avenue | 305 | 6 |
| Fletcher | Racine avenue | Perry | 2,007 | 6 |
| Foster avenue | Connecting | Western avenue | 41 | 6 |
| Foster avenue | Connecting | Robey | 12 | 6 |
| Gordon terrace | 550 feet E. of Halsted .. | Eastward | 72 | 6 |
| *Grace | Hoyne avenue | Westward | 165 | 8 |
| *Grace | Hamilton avenue | Eastward | 165 | 8 |
| Grace | W. Ravenswood Park .. | E. Ravenswood Park .. | 135 | 6 |
| *Grace | Hermitage avenue | Westward | 316 | 6 |
| †Irving Park avenue | Halsted | Eastward | 874 | 6 |
| Irving Park avenue | Crossing | Irving avenue | 67 | 8 |
| Irving Park avenue | Crossing | Seeley avenue | 68 | 8 |
| Irving Park avenue | Crossing | Hoyne avenue | 68 | 8 |
| Irving Park avenue | Crossing | Leavitt | 77 | 8 |
| Irving Park avenue | Crossing | Oakley avenue | 66 | 8 |
| Irving Park avenue, N. S. .. | Connecting | Western avenue | 37 | 8 |
| Irving Park avenue, S. S. .. | Connecting | Western avenue | 37 | 8 |
| Irving Park avenue | Crossing | Hamilton avenue | 68 | 8 |
| Irving avenue | Connecting | Irving Park avenue .. | 27 | 6 |
| *Junior terrace | Halsted | Hazel | 629 | 6 |
| *Kenmore avenue | Ainslie avenue | Southward | 595 | 6 |
| *Kenmore avenue | Lawrence avenue | Evanston avenue | 2,074 | 6 |
| Leland avenue | Paulina | Commercial avenue .. | 438 | 6 |
| Leland avenue | Palmer avenue | Wolcott avenue | 416 | 6 |
| Leavitt | Cosgrove avenue | Southward | 210 | 6 |
| Leavitt | Connecting | Irving Park avenue .. | 55 | 8 |
| †Linden avenue | Lawrence avenue | Argyle | 1,315 | 6 |
| Lyman avenue | Montrose boulevard .. | Northward | 248 | 6 |
| †Mara | Addison | Nellie | 617 | 6 |
| Marshfield avenue | Roscoe | School | 615 | 6 |
| Nelson | Ashland avenue | Westward | 450 | 6 |
| Noble avenue | E. Ravenswood Park .. | Eastward | 240 | 6 |
| Oakley avenue | Connecting | Irving Park avenue .. | 24 | 6 |
| Otto | Ashland avenue | Southport avenue | 1,349 | 6 |
| Patterson | 193 ft. W of Lincoln avenue .. | Robey | 923 | 6 |
| Patterson | Lincoln avenue | Westward | 193 | 6 |
| Perry | Noble avenue | Northward | 230 | 6 |
| Perry | Belmont avenue | Fletcher | 350 | 6 |
| †Pine Grove avenue | 180 ft. N. of Byron .. | Irving Park avenue .. | 423 | 6 |
| E. Ravenswood Park | Addison | Waveland avenue | 686 | 6 |
| †Robey | Winnemac avenue | Foster avenue | 1,010 | 6 |
| *Robey | Turner avenue | Northward | 240 | 8 |

LAKE VIEW DISTRICT—CONTINUED.

| STREET | FROM | TO | Length of Pipe in feet | Diameter in inches |
|--|--------------------------------|-----------------------|---------------------------------|--------------------------|
| Robey..... | 240 ft. N. of Turner avenue... | Grace..... | 98 | 8 |
| Robey..... | Connecting..... | Waveland avenue.... | 48 | 8 |
| School..... | W. Ravenswood Park.. | Eastward..... | 160 | 6 |
| *Seeley avenue..... | Addison..... | Northward..... | 517 | 6 |
| †Sheffield avenue..... | Bryn Mawr avenue.... | Foster avenue..... | 2635 | 6 |
| Southport avenue..... | Connecting..... | Balmoral Avenue.... | 41 | 6 |
| Southport avenue..... | Connecting..... | Center..... | 47 | 6 |
| State court..... | Briar place..... | Southward..... | 231 | 6 |
| *Surf..... | Lake View avenue..... | Commonwealth avenue | 400 | 6 |
| Waveland avenue..... | Alley W. of Lincoln.. | Lincoln..... | 89 | 6 |
| *Waveland avenue..... | Robey..... | Alley W. of Lincoln.. | 845 | 6 |
| Wellington..... | W. Ravenswood park.. | Wood..... | 250 | 6 |
| Wellington..... | Lincoln avenue..... | Perry..... | 606 | 6 |
| Western avenue..... | N. Fifty-ninth..... | Washington..... | 339 | 8 |
| Wilson avenue..... | 187 feet E. of Ashland avenue | Perry..... | 210 | 6 |
| *Wilson avenue..... | Kenmore avenue.... | Sheridan road..... | 390 | 6 |
| Wilson avenue..... | Robey..... | Winchester avenue... | 403 | 6 |
| Wilson avenue..... | Clark..... | Perry..... | 290 | 6 |
| *Winthrop avenue..... | Kenmore avenue.... | Lawrence avenue.... | 1363 | 6 |
| Total..... | | | 34,059 | |
| Add Branch Pipe for Hydrants..... | | | 384 | 4 |
| Add Branch Pipe for Hydrants..... | | | 516 | 6 |
| Total feet of pipe laid in Lake View District..... | | | 34,959 | |

*Laid by Deposit.

†Laid by Special Assessment.

LAKE DISTRICT.

| STREET | FROM | TO | Length of Pipe in feet | Diameter in inches |
|---------------------|--------------------------------|---------------------------|---------------------------------|--------------------------|
| Aberdeen | Crossing | Forty-eighth | 66 | 6 |
| Aberdeen | Crossing | Fiftieth | 42 | 6 |
| †Aberdeen | Forty-eighth | Fiftieth | 1,267 | 6 |
| †Ada | Fifty-seventh | Southward | 136 | 6 |
| †Ada | 73 ft. S. of Fifty-seventh | Fifty-ninth | 1,195 | 6 |
| Ada | Crossing | Sixty-seventh | 34 | 6 |
| Ada | Crossing | Sixty-third | 70 | 6 |
| Atlantic | Thirty-ninth | Root | 1,698 | 6 |
| †Archer avenue | Lawndale avenue | Hamlin avenue | 849 | 8 |
| Armour avenue | Fifty-eighth | Fifty-ninth | 591 | 6 |
| Carpenter | Crossing | Fiftieth | 66 | 6 |
| Carpenter | Crossing | Fifty-eighth | 25 | 6 |
| †Carpenter | Forty-eighth | Fiftieth | 1,262 | 6 |
| †Dreyer | 265 ft. S. of Fifty-first | 118 ft. N. of Fifty-third | 884 | 6 |
| †Eighty-seventh | Throop | Winchester avenue | 4,144 | 8 |
| †Elizabeth | Alley S. of Garfield boulevard | Fifty-seventh | 998 | 6 |
| Elizabeth | Fiftieth | Fifty-first | 632 | 6 |
| Elizabeth | Crossing | Sixty-third | 73 | 6 |
| Elizabeth | Connecting | Sixty-seventh | 30 | 6 |
| †Forty-third | California avenue | Rockwell | 1,293 | 8 |
| †Forty-seventh | Kedzie avenue | Hamlin avenue | 4,015 | 8 |
| Forty-seventh | Connecting | Armour avenue | 6 | 8 |
| Forty-eighth | Crossing | Marshfield avenue | 66 | 6 |
| Forty-ninth | Crossing | Lafin | 66 | 6 |
| Forty-ninth | Crossing | Justine | 66 | 6 |
| *Forty-ninth | Oakley avenue | Eastward | 325 | 6 |
| Forty-ninth | Crossing | Marshfield avenue | 66 | 6 |
| Fiftieth | Crossing | Marshfield avenue | 66 | 6 |
| Fiftieth court | Hoyle avenue | Westward | 707 | 6 |
| Fifty-fourth court | Wright | Eastward | 287 | 6 |
| *Fifty-fifth | Crossing | Ashland avenue | 60 | 4 |
| *Fifty-fifth | Crossing | Center avenue | 46 | 4 |
| *Fifty-fifth | Crossing | Halsted | 24 | 4 |
| Fifty-sixth place | Wright | Eastward | 591 | 6 |
| Fifty-sixth place | Wright | Westward | 575 | 6 |
| Fifty-seventh court | Wentworth avenue | LaSalle | 350 | 6 |
| †Goodspeed | Fifty-ninth | Sixty-third | 2,666 | 6 |
| Green | Crossing | Sixty-ninth | 33 | 6 |
| Halsted | Thirty-ninth | 200 feet N. of Root | 1,190 | 8 |
| †Hamlin avenue | Forty-seventh | Forty-ninth | 1,290 | 8 |
| Hermitage avenue | Sixty-second | Sixty-third | 700 | 8 |
| †Hoyle avenue | Forty-eighth | Forty-ninth | 668 | 6 |
| †Homan avenue | Fifty-first | Northward | 648 | 6 |
| Justine | Forty-ninth | Fiftieth | 704 | 6 |
| †Justine | Sixty-first | Sixty-third | 1,348 | 6 |
| Justine | Sixty-third | Southward | 108 | 6 |
| Lafin | Forty-ninth | Fiftieth | 707 | 6 |
| Lafin | Connecting | Sixty-third | 6 | 6 |
| Lafin | 265 feet N. of Sixty-third | Northward | 264 | 6 |
| †Lawndale avenue | Forty-seventh | Forty-ninth | 1,291 | 6 |
| Loomis | Connecting | Sixty-third | 12 | 6 |
| Loomis | Sixty-fourth | Sixty-fifth | 695 | 6 |
| Loomis | Sixty-fifth | Sixty-sixth | 644 | 6 |
| †May | Forty-eighth | Fiftieth | 1,270 | 6 |
| May | Crossing | Fiftieth | 66 | 6 |

LAKE DISTRICT—CONTINUED.

| STREET | FROM | TO | Length of Pipe in feet | Diameter in inches |
|--|--------------------------------|---------------------------|---------------------------------|--------------------------|
| May | Crossing | Forty-eighth | 25 | 6 |
| Marshfield avenue | Connecting | Sixty-first | 24 | 6 |
| Packers avenue | 1071 ft. N. of Exchange ave .. | Eastward | 68 | 12 |
| †Paulina | Fifty-second | Fifty-fourth | 1,404 | 6 |
| †Paulina | Fifty-ninth | Sixty-third | 2,707 | 6 |
| Peoria | Crossing | Sixty-ninth | 29 | 6 |
| †Ridgeway avenue | Forty-seventh | Forty-ninth | 1,217 | 6 |
| †Seeley avenue | Forty-eighth | Forty-ninth | 630 | 6 |
| *Sixty-first | Marshfield avenue | Hermitage avenue | 625 | 6 |
| Sixty-second | Crossing | May | 66 | 6 |
| †Sixty-third | Ashland avenue | Lafin | 757 | 12 |
| †Sixty-third | Elizabeth | Bishop | 1,340 | 12 |
| Sixty-third | Connecting | Goodspeed | 12 | 12 |
| †Sixty-seventh | Green | Peoria | 339 | 6 |
| †Sixty-seventh | Halsted | Green | 308 | 6 |
| †Sixty-seventh | Morgan | May | 1,048 | 6 |
| Sixty-seventh | Connecting | May | 28 | 6 |
| †Sixty-seventh | Center avenue | Loomis | 1,282 | 6 |
| †Sixty-eighth | La Fayette | Perry avenue | 435 | 6 |
| Sixty-ninth | Loomis | Ada | 336 | 6 |
| Sixty-ninth | Crossing | State | 68 | 6 |
| Seventieth place | Connecting | State | 72 | 6 |
| Seventieth | Crossing | State | 104 | 6 |
| Seventy-first | Crossing | State | 102 | 8 |
| Seventy-third | Crossing | State | 96 | 8 |
| Seventy-fourth | Crossing | State | 68 | 6 |
| †Talmon avenue | Forty-third | Forty-fourth | 612 | 6 |
| †Throop | Alley S. of Fifty-fifth .. | 264 ft. N. of Fifty-ninth | 2,042 | 6 |
| Throop | Crossing | Sixty-third | 72 | 6 |
| Throop | Connecting | Sixty-seventh | 32 | 6 |
| Transit avenue | Packers avenue | Westward | 503 | 8 |
| †Vail | Sixty-third | Sixty-seventh | 2,586 | 6 |
| †Washtenaw avenue | Forty-third | Forty-fourth | 612 | 6 |
| Wright | Forty-fourth | Forty-fourth place | 308 | 6 |
| †Wood | Fifty-ninth | Sixty-second | 2,019 | 8 |
| †Wood | Sixty-second | Sixty-third | 682 | 8 |
| Total | | | 59,639 | |
| Add Branch Pipe for Hydrants | | | 480 | 4 |
| Add Branch Pipe for Hydrants | | | 1,092 | 6 |
| Total feet of pipe laid in Lake District | | | 61,211 | |

*Laid by Deposit.

†Laid by Special Assessment.

JEFFERSON DISTRICT.

| STREET | FROM | TO | Length of Pipe in feet | Diameter in inches |
|--------------------------------|---------------------------------|-----------------------------------|---------------------------------|--------------------------|
| *Alley N. of Irving Pk. ave. | Bernard avenue | Eberley avenue | 337 | 6 |
| *Alley N. of Irving Pk. ave. | Bernard avenue | Kimball avenue | 330 | 6 |
| *Alley N. of Irving Pk. ave. | Eberley avenue | Central Park avenue | 664 | 6 |
| †Addison | 402 feet W. of N. Fortieth ave. | N. Forty-first court | 451 | 12 |
| Addison | 317 feet W. of N. Fortieth ave. | Westward | 96 | 12 |
| Albany avenue | Grace | Northward | 1,106 | 6 |
| Albany avenue | North crossing | Irving Park avenue | 25 | 6 |
| Albany avenue | South crossing | Irving Park avenue | 25 | 6 |
| Allen avenue | Crossing | Irving Park avenue | 43 | 8 |
| *Avers avenue | Irving Park avenue | Montrose avenue | 2,604 | 6 |
| *Ballou | Wrightwood avenue | Marianna | 709 | 6 |
| Belden avenue | Crossing | N. Forty-second court | 66 | 6 |
| †Belden avenue | N. Forty-eighth ave. | N. Forty-ninth avenue | 609 | 6 |
| *Belleplaine avenue | Monticello avenue | Ridgeway avenue | 665 | 6 |
| *Bereteau avenue | Springfield avenue | Harding avenue | 338 | 6 |
| Bernard | Belmont avenue | Center avenue | 588 | 6 |
| *Bernard | Belleplaine avenue | First alley N. of Irving Pk. ave. | 520 | 6 |
| Bernard | Connecting | Montrose avenue | 10 | 6 |
| Bernard | North crossing | Irving Park avenue | 24 | 6 |
| Bernard | South crossing | Irving Park avenue | 24 | 6 |
| Byron | Crossing | N. Forty-second ave. | 84 | 6 |
| California avenue | South crossing | Irving Park avenue | 27 | 8 |
| California avenue | Crossing | Irving Park avenue | 104 | 8 |
| Campbell avenue | North crossing | Irving Park avenue | 37 | 6 |
| Campbell avenue | South crossing | Irving Park avenue | 25 | 6 |
| †Catalpa court | Fullerton avenue | Humboldt boulevard | 840 | 6 |
| †Central Park avenue | Diversey avenue | Milwaukee avenue | 1,112 | 8 |
| Central Park avenue | Crossing | Irving Park avenue | 124 | 8 |
| Center avenue | Crossing | Kedzie avenue | 77 | 6 |
| Central Park avenue | Connecting | Montrose avenue | 12 | 8 |
| Charles avenue | North crossing | Irving Park avenue | 24 | 6 |
| Christiana avenue | Irving Park avenue | Southward | 25 | 6 |
| Christiana avenue | North crossing | Irving Park avenue | 25 | 6 |
| *Choctaw avenue | Selwyn avenue | Northwest | 143 | 6 |
| Choctaw avenue | 143 ft. N. W. of Selwyn avenue | Maple avenue | 322 | 6 |
| *Conneaut avenue | Hoffman avenue | California avenue | 1,246 | 6 |
| Conneaut avenue | Crossing | Kedzie avenue | 47 | 6 |
| †Costello avenue | N. Fortieth avenue | C., M. & St. P. Ry. | 276 | 6 |
| Costello avenue | Crossing | N. Forty-fourth avenue | 57 | 6 |
| Costello avenue | Monticello avenue | Central Park avenue | 669 | 6 |
| Cortland | Ridgeway avenue | Hamlin avenue | 310 | 8 |
| Dakin | N. Forty-ninth avenue | N. Fifty-second avenue | 1,959 | 6 |
| Dickens avenue | Crossing | N. Forty-fourth avenue | 88 | 6 |
| Diversey avenue | Blow-off | Western avenue | 17 | 12 |
| Diversey avenue | Crossing | Western avenue | 31 | 16 |
| Dover avenue | North crossing | Irving Park avenue | 22 | 6 |
| Drake avenue | South crossing | Irving Park avenue | 25 | 6 |
| Drake avenue | North crossing | Irving Park avenue | 24 | 6 |
| Drake avenue | Melrose | Henderson avenue | 714 | 6 |
| *Eberley avenue | Alley N. of Irving Park avenue | Northward | 310 | 6 |
| Eberley avenue | North crossing | Irving Park avenue | 24 | 6 |
| Eberley avenue | South crossing | Irving Park avenue | 24 | 6 |
| †Eddy | N. Fortieth avenue | Avondale avenue | 2,414 | 6 |
| Elston avenue | South crossing | Irving Park avenue | 37 | 6 |
| Elston avenue | North crossing | Irving Park avenue | 47 | 8 |

JEFFERSON DISTRICT—CONTINUED.

| STREET | FROM | TO | Length of Pipe in feet | Diameter in inches |
|-----------------------------|----------------------------------|---------------------------------|---------------------------------|-----------------------|
| *Elston avenue..... | Irving Park avenue... | N. Fortieth avenue... | 3,038 | 8 |
| †Elston avenue..... | 75 ft. N. of Montrose avenue... | Forest Glen avenue... | 9,089 | 8 |
| Everett..... | N. Forty-first avenue... | Westward..... | 133 | 8 |
| Evergreen avenue..... | Humboldt boulevard... | Southeast..... | 109 | 6 |
| Faraday..... | 440 ft. E. of Irving... | Northeast..... | 65 | 6 |
| †N. Fortieth court..... | North avenue..... | Wabansia avenue... | 612 | 6 |
| †N. Fortieth avenue..... | Berteau avenue..... | Montrose avenue..... | 1,342 | 6 |
| †N. Fortieth avenue..... | 99 ft. S. of Cortland... | 75 feet S. of Bloomingdale road | 656 | 12 |
| †N. Fortieth avenue..... | Grace..... | Byron..... | 637 | 6 |
| N. Fortieth avenue..... | Connecting..... | Costello avenue..... | 48 | 6 |
| †N. Fortieth avenue..... | Irving Park avenue... | Centre..... | 1,229 | 6 |
| N. Fortieth avenue..... | Addison..... | Milton place..... | 337 | 6 |
| N. Fortieth avenue..... | Addison..... | Eddy..... | 334 | 6 |
| †N. Forty-first avenue..... | Bloomingdale road... | Armitage avenue..... | 1,209 | 6 |
| †N. Forty-first avenue..... | Byron..... | Irving Park avenue... | 646 | 6 |
| N. Forty-first avenue..... | South crossing..... | Irving Park avenue... | 18 | 6 |
| N. Forty-first avenue..... | North crossing..... | Irving Park avenue... | 24 | 6 |
| †N. Forty-first court..... | Dickens avenue..... | Armitage avenue..... | 594 | 6 |
| *N. Forty-second avenue... | Dickens avenue..... | Northward..... | 300 | 8 |
| *N. Forty-second avenue... | 300 feet N. of Dickens avenue... | Humboldt avenue... | 293 | 8 |
| N. Forty-third court..... | 289 feet S. of Byron... | Southward..... | 27 | 6 |
| N. Forty-third court..... | Cullom..... | Northward..... | 196 | 8 |
| N. Forty-third court..... | 184 feet N. of Irving Park ave. | Northward..... | 28 | 6 |
| †N. Forty-fourth avenue... | Cortland..... | Armitage avenue..... | 591 | 8 |
| N. Forty-fourth avenue... | Crossing..... | Irving Park avenue... | 110 | 8 |
| †N. Forty-fourth court..... | Cortland avenue..... | Armitage avenue..... | 642 | 6 |
| *N. Forty-fifth avenue..... | Armitage avenue..... | Humboldt avenue... | 1,283 | 6 |
| †N. Forty-fifth avenue..... | Cortland avenue..... | Armitage avenue..... | 642 | 6 |
| †N. Forty-fifth avenue..... | 310 feet N. of Leland avenue... | Lawrence avenue..... | 275 | 6 |
| N. Forty-seventh avenue... | W. Cuyler..... | Prescott..... | 381 | 6 |
| N. Forty-seventh avenue... | South crossing..... | Irving Park avenue... | 26 | 6 |
| *N. Forty-seventh avenue... | Irving Park avenue... | Northward..... | 300 | 6 |
| N. Forty-seventh avenue... | North crossing..... | Irving Park avenue... | 24 | 6 |
| †N. Forty-seventh court... | Wilson avenue..... | Sunnyside avenue.... | 652 | 6 |
| N. Forty-eighth avenue... | Connecting..... | Milwaukee avenue.... | 23 | 12 |
| †N. Forty-eighth court... | Cortland avenue..... | Armitage avenue..... | 647 | 6 |
| †N. Forty-eighth court... | Armitage avenue..... | Dickens avenue..... | 585 | 6 |
| *Forest avenue..... | Irving..... | Northward..... | 467 | 6 |
| N. Fifty-fourth avenue... | Leland avenue..... | Auburn avenue..... | 374 | 6 |
| †N. Fifty-fourth court... | Fullerton avenue..... | Wrightwood avenue... | 1,329 | 6 |
| †N. Fifty-fifth avenue..... | Fullerton avenue..... | Wrightwood avenue... | 1,329 | 6 |
| †N. Fifty-sixth avenue..... | Armitage avenue..... | Wrightwood avenue... | 3,919 | 8 |
| †N. Fifty-sixth court..... | Armitage avenue..... | Fullerton avenue..... | 2,529 | 6 |
| N. Fifty-sixth court..... | Connecting..... | Fullerton avenue..... | 42 | 6 |
| †N. Fifty-seventh avenue... | Armitage avenue..... | Fullerton avenue..... | 2,534 | 6 |
| N. Fifty-seventh avenue... | Connecting..... | Fullerton avenue..... | 42 | 6 |
| †N. Fifty-seventh court... | Armitage avenue..... | Fullerton avenue..... | 2,527 | 6 |
| N. Fifty-seventh court... | Connecting..... | Fullerton avenue..... | 42 | 6 |
| †N. Fifty-eighth avenue... | Fullerton avenue..... | Grand avenue..... | 1,492 | 8 |
| N. Fifty-eighth avenue... | Connecting..... | Fullerton avenue..... | 30 | 8 |
| N. Fifty-eighth court... | Connecting..... | Fullerton avenue..... | 40 | 6 |
| †N. Fifty-eighth court... | Grand avenue..... | Fullerton avenue..... | 1,400 | 6 |
| †N. Fifty-ninth avenue... | Grand avenue..... | Fullerton avenue..... | 1,312 | 6 |
| N. Fifty-ninth avenue... | Connecting..... | Fullerton avenue..... | 42 | 6 |
| †N. Fifty-ninth court... | Grand avenue..... | Fullerton avenue..... | 1,222 | 6 |

JEFFERSON DISTRICT—CONTINUED.

| STREET | FROM | TO | Length of Pipe in feet | Diameter in inches |
|-------------------------------|----------------------------------|----------------------------|---------------------------------|-----------------------|
| Francisco | South Crossing | Irving Park avenue ... | 25 | 6 |
| Francisco | North Crossing | Irving Park avenue ... | 25 | 6 |
| †Fullerton avenue | N. Fifty-fourth avenue .. | N. Fifty-sixth avenue .. | 1,302 | 8 |
| Fullerton avenue | Connecting | Sawyer avenue | 46 | 12 |
| †Fullerton avenue | N. Fifty-sixth avenue .. | N. Sixtieth avenue | 2,613 | 8 |
| George | Crossing | Kedzie avenue | 79 | 6 |
| Grace | Albany avenue | Troy | 350 | 6 |
| †Grace | Kedzie avenue | Troy | 296 | 6 |
| Grace | Connecting | Sacramento avenue | 23 | 6 |
| Grand avenue | Connecting | N. Sixtieth avenue | 29 | 8 |
| *Greenwood avenue | Linden avenue | Myrtle avenue | 625 | 8 |
| Hamlin avenue | Irving Park avenue | Southward | 89 | 8 |
| *Hamlin avenue | Irving Park avenue | Berteau avenue | 1,265 | 8 |
| Hamlin avenue | Connecting | Montrose avenue | 15 | 8 |
| Hamlin avenue | Crossing | Schubert avenue | 47 | 8 |
| Hancock avenue | Crossing | Wrightwood avenue | 42 | 6 |
| *Hamlin avenue | Montrose avenue | Berteau avenue | 1,316 | 8 |
| *Hancock avenue | Marianna avenue | Southward | 520 | 6 |
| *Harding avenue | Montrose avenue | Berteau avenue | 1,304 | 6 |
| †Harding avenue | 425 feet N. of North avenue .. | Bloomingdale road | 820 | 6 |
| Homan avenue | 210 feet S. of Berteau avenue .. | Southward | 125 | 8 |
| Homan avenue | 330 feet S. of Center | Southward | 120 | 8 |
| Homan avenue | Crossing | Irving Park avenue | 114 | 8 |
| Homan avenue | Mentmore avenue | Southward | 192 | 8 |
| Homan avenue | Mentmore avenue | Northward | 168 | 8 |
| †Homan avenue | Costello avenue | Fullerton avenue | 1,240 | 8 |
| †Homan avenue | Fullerton avenue | Northward | 476 | 6 |
| *Humboldt avenue | Hamlin avenue | Central Park avenue | 328 | 6 |
| *Humboldt boulevard | Helen court | Diversey | 1,658 | 6 |
| Humboldt | North crossing | Irving Park avenue | 25 | 6 |
| Humboldt | South crossing | Irving Park avenue | 25 | 6 |
| *Irving | Selwyn avenue | Forest avenue | 337 | 6 |
| Irving Park avenue, S. S. .. | Crossing | Albany avenue | 72 | 8 |
| Irving Park avenue, N. S. .. | Crossing | Albany avenue | 72 | 8 |
| Irving Park avenue, S. S. .. | Crossing | Allen avenue | 66 | 8 |
| Irving Park avenue, N. S. .. | Allen avenue | Vernon avenue | 477 | 8 |
| Irving Park avenue, N. S. .. | Crossing | Bernard avenue | 71 | 8 |
| Irving Park avenue, S. S. .. | Crossing | Bernard avenue | 71 | 8 |
| Irving Park avenue, N. S. .. | Crossing | California avenue | 76 | 8 |
| Irving Park avenue, S. S. .. | Crossing | California avenue | 76 | 8 |
| Irving Park avenue, S. S. .. | Crossing | Campbell avenue | 68 | 8 |
| *Irving Park avenue, N. S. .. | Central Park avenue .. | Springfield avenue | 1,963 | 6 |
| Irving Park avenue, S. S. .. | Crossing | Central Park avenue | 75 | 8 |
| Irving Park avenue, N. S. .. | Crossing | Central Park avenue | 66 | 8 |
| Irving Park avenue, N. S. .. | Crossing | Charles | 70 | 8 |
| Irving Park avenue, S. S. .. | Crossing | Christiana avenue | 73 | 8 |
| Irving Park avenue, N. S. .. | Crossing | Christiana avenue | 70 | 8 |
| Irving Park avenue, N. S. .. | Crossing | Dover avenue | 70 | 8 |
| Irving Park avenue, N. S. .. | Crossing | Drake avenue | 70 | 8 |
| Irving Park avenue, S. S. .. | Crossing | Drake avenue | 71 | 8 |
| Irving Park avenue, N. S. .. | Crossing | Eberley avenue | 70 | 8 |
| Irving Park avenue, S. S. .. | Crossing | Eberley avenue | 71 | 8 |
| Irving Park avenue, S. S. .. | Crossing | Elston avenue | 120 | 8 |
| Irving Park avenue, S. S. .. | Crossing | N. Fortieth avenue | 191 | 8 |
| Irving Park avenue, N. S. .. | Crossing | N. Forty-first court | 89 | 8 |

JEFFERSON DISTRICT—CONTINUED.

| STREET | FROM | TO | Length of Pipe in feet | Diameter in inches |
|----------------------------|--------------------------------|---------------------------------|---------------------------------|-----------------------|
| Irving Park avenue, S. S. | Crossing | N. Forty-first court ... | 87 | 8 |
| Irving Park avenue, N. S. | Crossing | N. Forty-first avenue .. | 88 | 8 |
| Irving Park avenue, S. S. | Crossing | N. Forty-first avenue .. | 94 | 8 |
| Irving Park avenue, N. S. | Crossing | N. Forty-second court .. | 61 | 8 |
| Irving Park avenue, S. S. | Crossing | N. Forty-second court .. | 83 | 8 |
| Irving Park avenue, N. S. | Crossing | N. Forty-third court .. | 75 | 8 |
| Irving Park avenue, S. S. | Crossing | N. Forty-third court .. | 74 | 8 |
| Irving Park avenue, N. S. | Crossing | N. Forty-third avenue .. | 47 | 8 |
| Irving Park avenue, S. S. | Crossing | N. Forty-third avenue .. | 71 | 8 |
| Irving Park avenue, S. S. | Crossing | N. Forty-fourth avenue .. | 72 | 8 |
| Irving Park avenue, N. S. | Crossing | N. Forty-fourth avenue .. | 72 | 8 |
| †Irving Park avenue, N. S. | N. Forty-fifth court .. | N. Forty-fifth avenue .. | 146 | 8 |
| †Irving Park avenue, S. S. | N. Forty-fifth court .. | N. Forty-fifth avenue .. | 132 | 8 |
| Irving Park avenue, N. S. | Crossing | N. Forty-seventh ave .. | 70 | 8 |
| Irving Park avenue, S. S. | Crossing | N. Forty-seventh ave .. | 72 | 8 |
| *Irving Park avenue, N. S. | N. Forty-seventh ave .. | N. Forty-eighth ave .. | 383 | 8 |
| Irving Park avenue, N. S. | Connecting | N. Forty-eighth ave .. | 67 | 8 |
| Irving Park avenue, S. S. | Crossing | Hamlin avenue | 76 | 8 |
| Irving Park avenue, S. S. | Crossing | Heine | 69 | 8 |
| Irving Park avenue, N. S. | Crossing | Heine | 70 | 8 |
| Irving Park avenue, S. S. | Crossing | Humboldt | 71 | 8 |
| Irving Park avenue, N. S. | Crossing | Humboldt | 70 | 8 |
| Irving Park avenue | Connecting | Milwaukee avenue | 3 | 12 |
| Irving Park avenue | Crossing Irving Park avenue .. | 103 W. of N. Fortieth avenue .. | 64 | 8 |
| Irving Park avenue, S. S. | Crossing | Irving avenue | 83 | 8 |
| Irving Park avenue, N. S. | Crossing | Irving avenue | 84 | 8 |
| Irving Park avenue, N. S. | Crossing | Kedzie avenue | 5 | 12 |
| Irving Park avenue, S. S. | Crossing | Kedzie avenue | 76 | 8 |
| Irving Park avenue, S. S. | Crossing | Kedzie avenue | 6 | 12 |
| Irving Park avenue, S. S. | Crossing | Kimball avenue | 76 | 8 |
| Irving Park avenue, S. S. | Crossing | Kimball avenue | 78 | 8 |
| Irving Park avenue, N. S. | Crossing | Kimball avenue | 75 | 8 |
| Irving Park avenue, S. S. | Crossing | Lawndale avenue | 70 | 8 |
| Irving Park avenue, S. S. | Connecting | Milwaukee avenue | 6 | 12 |
| Irving Park avenue, N. S. | Crossing | Milwaukee avenue | 24 | 8 |
| Irving Park avenue, N. S. | Crossing | Mozart | 71 | 8 |
| Irving Park avenue, S. S. | Crossing | Mozart | 71 | 8 |
| Irving Park avenue, S. S. | Crossing | Sacramento avenue | 78 | 8 |
| Irving Park avenue, N. S. | Crossing | Sacramento avenue | 78 | 8 |
| Irving Park avenue, N. S. | Crossing | Sheridan avenue | 70 | 8 |
| Irving Park avenue, S. S. | Crossing | Sheridan avenue | 70 | 8 |
| Irving Park avenue, S. S. | Crossing | Springfield avenue | 70 | 8 |
| Irving Park avenue, N. S. | Crossing | Springfield avenue | 71 | 8 |
| Irving Park avenue, S. S. | Crossing | Spaulding avenue | 73 | 8 |
| Irving Park avenue, N. S. | Crossing | Spaulding avenue | 71 | 8 |
| Irving Park avenue, N. S. | Crossing | Syracuse avenue | 42 | 8 |
| Irving Park avenue, N. S. | Crossing | Troy | 70 | 8 |
| Irving Park avenue, S. S. | Crossing | Troy | 70 | 8 |
| Irving Park avenue, S. S. | Crossing | Vernon avenue | 76 | 8 |
| Irving Park avenue, N. S. | Crossing | Whipple | 69 | 8 |
| Irving Park avenue, S. S. | Crossing | Whipple | 69 | 8 |
| Kedzie avenue | Crossing | Irving Park avenue .. | 148 | 24 |
| Kedzie avenue | Roscoe | School | 634 | 8 |
| †Laurel | Diversey | George | 742 | 6 |
| Lawndale avenue | South crossing | Irving Park avenue .. | 22 | 6 |

JEFFERSON DISTRICT—CONTINUED.

| STREET | FROM | TO | Length of Pipe in feet | Diameter in inches |
|---------------------------|---------------------------------|-------------------------|---------------------------------|--------------------------|
| *Lawndale avenue..... | Belleplaine avenue ... | Berteau avenue..... | 627 | 6 |
| *Lawndale avenue..... | Montrose avenue | Berteau avenue..... | 1,336 | 6 |
| Lawndale avenue..... | 166 feet N. of Wabansia ave.. | Northward..... | 279 | 6 |
| Leland avenue..... | N. Forty-fifth avenue .. | Eastward..... | 324 | 6 |
| McLean avenue..... | Crossing..... | N. Forty-fourth ave .. | 57 | 6 |
| *McLean avenue..... | Hamlin avenue..... | Eastward..... | 140 | 6 |
| Melrose..... | Drake avenue..... | Eastward..... | 469 | 6 |
| Milton place..... | Crawford avenue | Westward..... | 651 | 6 |
| Milwaukee avenue | Crossing..... | Irving Park avenue .. | 124 | 12 |
| Monticello avenue | 375 ft. S. of Armitage avenue. | Southward..... | 60 | 6 |
| *Monticello avenue | Dunning..... | Northward..... | 480 | 6 |
| *Monticello avenue | Irving Park avenue | Berteau avenue..... | 1,291 | 6 |
| *Monticello avenue | Berteau avenue..... | Montrose avenue | 1,336 | 6 |
| †Montrose avenue | N. Fortieth avenue..... | Central Park avenue .. | 2,724 | 6 |
| Montrose avenue | Homan avenue..... | Bernard avenue..... | 327 | 6 |
| †Montrose avenue | Western avenue..... | Chicago river | 1,576 | 6 |
| Mozart..... | 370 ft. N. of Diversey avenue.. | Northward..... | 180 | 6 |
| Mozart..... | Irving Park avenue | Southward..... | 25 | 6 |
| Mozart..... | Irving Park avenue | Northward..... | 25 | 6 |
| Pensacola avenue..... | 535 ft. W. of Campbell avenue. | Westward..... | 77 | 4 |
| Prescott..... | Crossing..... | N. Fortieth avenue .. | 41 | 6 |
| Prescott..... | Crossing..... | Irving avenue..... | 83 | 6 |
| Ridgeway avenue..... | Cortland..... | Northward..... | 205 | 6 |
| *Ridgeway avenue..... | Berteau avenue..... | Irving Park avenue .. | 1,260 | 6 |
| *Ridgeway avenue..... | Montrose avenue | Berteau avenue..... | 1,339 | 6 |
| Ridgeway avenue..... | Schubert avenue..... | Southward..... | 346 | 6 |
| Roscoe..... | Elston avenue..... | Whipple..... | 233 | 8 |
| Roscoe..... | Troy..... | Kedzie avenue..... | 326 | 8 |
| Sacramento avenue | Grace..... | Irving Park avenue .. | 1,353 | 8 |
| Sacramento avenue | Grace..... | Waveland avenue | 615 | 8 |
| Sacramento avenue | Waveland avenue | Southward..... | 216 | 8 |
| Sacramento avenue | Crossing..... | Irving Park avenue .. | 112 | 8 |
| †Sawyer avenue..... | Mentmore avenue | Fullerton avenue..... | 754 | 6 |
| †Selwyn avenue..... | Linden avenue..... | St. Charles avenue .. | 1,596 | 6 |
| Sheridan avenue..... | South crossing..... | Irving Park avenue .. | 25 | 6 |
| Sheridan avenue..... | North crossing..... | Irving Park avenue .. | 25 | 6 |
| Schubert avenue..... | Hamlin avenue..... | Ridgeway avenue..... | 346 | 6 |
| †N. Sixtieth avenue | Fullerton avenue..... | Grand avenue..... | 1,193 | 8 |
| Smalley court..... | Crossing..... | Wrightwood avenue .. | 42 | 6 |
| Spaulding avenue..... | Diversey..... | Franklin..... | 654 | 6 |
| Spaulding avenue..... | North crossing..... | Irving Park avenue .. | 25 | 6 |
| Spaulding avenue..... | South crossing..... | Irving Park avenue .. | 25 | 6 |
| *Springfield avenue..... | Belleplaine avenue | Berteau avenue..... | 657 | 6 |
| *Springfield avenue..... | Elston avenue..... | Montrose avenue..... | 1,102 | 6 |
| Springfield avenue..... | North crossing..... | Irving Park avenue .. | 23 | 6 |
| Springfield avenue..... | South crossing..... | Irving Park avenue .. | 23 | 6 |
| †Strong..... | N. Fiftieth avenue..... | N. Fifty-third avenue.. | 1,992 | 6 |
| *Tripp avenue..... | Humboldt avenue..... | Belden avenue..... | 706 | 6 |
| Troy..... | Grace..... | Waveland avenue..... | 645 | 6 |
| †Troy..... | Grace..... | Irving Park avenue .. | 1,266 | 6 |
| Troy..... | North crossing..... | Irving Park avenue .. | 25 | 6 |
| Troy..... | South crossing..... | Irving Park avenue .. | 25 | 6 |
| Wellington..... | Crossing..... | Kedzie avenue..... | 84 | 8 |
| Western avenue..... | Blow-off..... | In tunnel shaft..... | 118 | 8 |
| Western avenue..... | Noble..... | Franklin..... | 1,484 | 24 |

JEFFERSON DISTRICT—CONTINUED.

| STREET | FROM | TO | Length of Pipe in feet | Diameter in inches |
|---|----------------------------------|-------------------------|---------------------------------|-----------------------|
| Western avenue | Armitage avenue | Homer | 388 | 24 |
| *Wabansia avenue | Rockwell | Western avenue | 918 | 8 |
| Warner avenue | 97 feet W. of N. Fortieth avenue | Westward | 220 | 12 |
| Whipple | Grace | Waveland avenue .. | 640 | 6 |
| Whipple | Grace | Irving Park avenue ... | 1,284 | 6 |
| Whipple | North crossing | Irving Park avenue ... | 25 | 6 |
| Whipple | South crossing | Irving Park avenue ... | 25 | 6 |
| Whipple .. | Crossing | Roscoe | 41 | 6 |
| †Wilson avenue | N. Forty-seventh ave . | N. Forty-seventh court | 333 | 8 |
| *Wrightwood avenue | Ballou | Central Park avenue .. | 634 | 8 |
| †Wrightwood avenue | N. Fifty-fourth avenue | N. Fifty-sixth avenue . | 1,300 | 8 |
| *Wrightwood avenue | Kimball avenue | Ballou | 663 | 8 |
| Total | | | 131,148 | 4 6 |
| Add Branch Pipe for Hydrants | | | 804 | |
| Add Branch Pipe for Hydrants | | | 2,544 | |
| Total feet of pipe laid in Jefferson District | | | 134,496 | |

*Laid by Deposit.

†Laid by Special Assessment.

CALUMET DISTRICT.

| STREET | FROM | TO | Length of Pipe in feet | Diameter in inches |
|---|---------------------------------|--------------------------------|---------------------------------|--------------------------|
| †Butler | 100th | 100th place | 343 | 6 |
| †Butler | 118th | 119th | 634 | 6 |
| †Emerald avenue | Eighty-ninth | Ninetieth | 550 | 6 |
| Emerald avenue | 123d | Southward | 169 | 6 |
| Halsted | Ninetieth | Southward | 90 | 8 |
| †La Salle | Ninety-ninth | 103d | 2,627 | 6 |
| 102d | Prospect avenue | Westward | 702 | 6 |
| †104th place | Prospect avenue | Wood | 1,322 | 6 |
| 110th place | State | Westward | 283 | 6 |
| Parnell avenue | Crossing | 118th | 45 | 6 |
| *Vincennes avenue | 331 ft. S. of Eighty-seventh .. | 127 ft. S. of Eighty-eighth .. | 467 | 12 |
| Vincennes avenue | Eighty-seventh | Southward | 390 | 12 |
| †Walnut | Ninety-seventh | Ninety-ninth | 1,289 | 6 |
| †Winchester avenue | Eighty-seventh | Eighty-eighth | 768 | 6 |
| Total | | | 9,679 | 4 |
| Add Branch Pipe for Hydrants | | | 168 | |
| Add Branch Pipe for Hydrants | | | 276 | |
| Total feet of pipe laid in Jefferson District | | | 10,123 | |

*Laid by Deposit.

†Laid by Special Assessment.

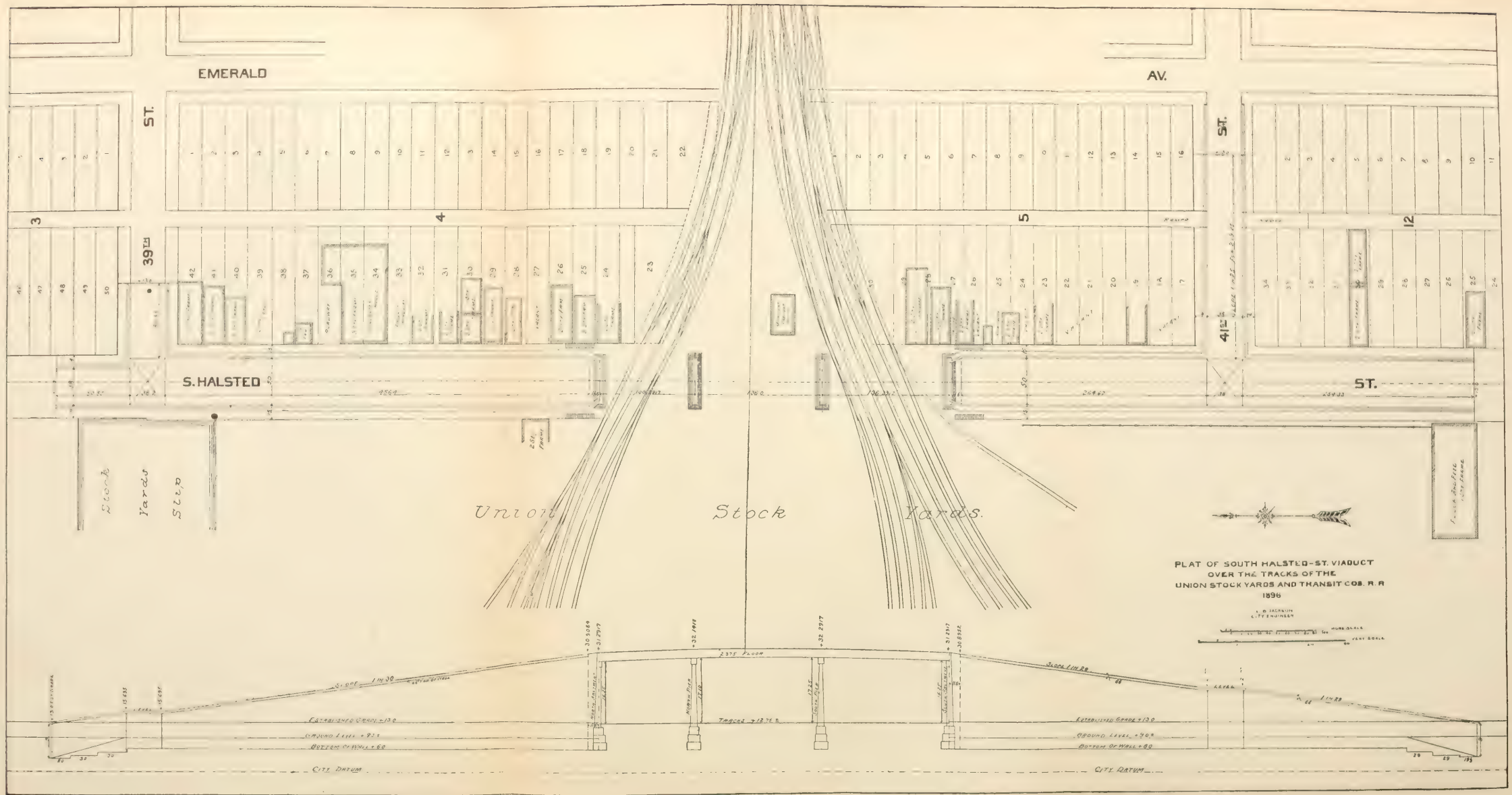
RECAPITULATION OF PIPE LAID DURING 1896, INCLUDING HYDRANT BRANCHES.

| DIVISION. | DIAMETER OF PIPE IN INCHES. | | | | | | Total length of Pipe in Feet. |
|---------------------|-----------------------------|---------|---------|----------|----------|----------|----------------------------------|
| | 4-inch. | 6-inch. | 8-inch. | 12-inch. | 16-inch. | 24-inch. | 36-inch. |
| North ..... | ..... | 3,577 | 584 | ..... | ..... | ..... | 4,161 |
| South ..... | ..... | 752 | ..... | ..... | ..... | ..... | 752 |
| West | 2,336 | 78,702 | 24,806 | 10,431 | ..... | ..... | 116,275 |
| Hyde Park | 720 | 46,769 | 17,064 | 6,072 | ..... | ..... | 70,625 |
| Lake View | 384 | 30,145 | 4,430 | ..... | ..... | ..... | 34,959 |
| Lake | 610 | 41,587 | 16,887 | 2,177 | ..... | ..... | 61,211 |
| Jefferson | 881 | 84,895 | 44,898 | 1,771 | 31 | 2,020 | 134,496 |
| Calumet | 168 | 9,008 | 90 | 857 | ..... | ..... | 10,123 |
| Total in feet | 5,099 | 295,435 | 108,709 | 21,308 | 31 | 2,020 | 432,602 |

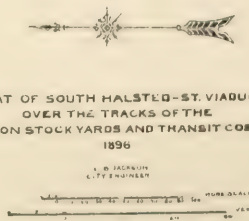
TABLE SHOWING AMOUNT OF PIPE IN THE CITY OF CHICAGO,
AT THE CLOSE OF 1896.

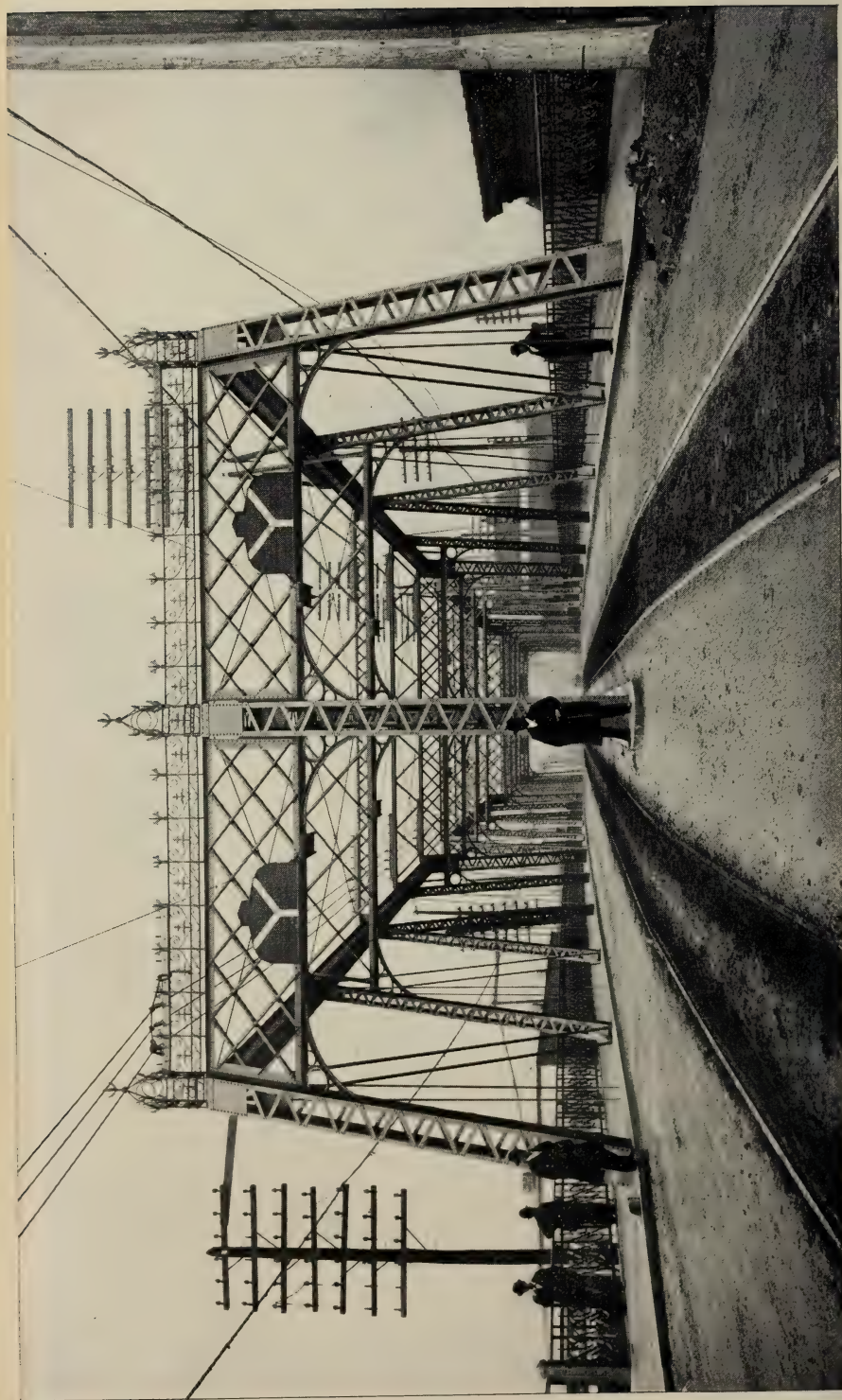
| Diameter of Pipe. | 1895. | 1896. | | | |
|--------------------|---------------------------------|--|-------------------------------|---|--------------------------------|
| | Amount in Use in Feet. | Amount Taken Up or Abandoned in Feet. | Amount Laid in Feet. | Grand Total in Feet in Use at the close of 1896. | Grand Total in Miles. |
| 48 | 1,355 | ..... | ..... | 1,355 | 0.1355 |
| 36 | 117,937 | ..... | ..... | 117,937 | 2.21777 |
| 30 | 5,351 | ..... | ..... | 5,351 | 1.071 |
| 28 | 160 | ..... | ..... | 160 | 0.016 |
| 24 | 279,002 | ..... | 2,020 | 281,022 | 5.31122 |
| 20 | 7,931 | ..... | ..... | 7,931 | 1.07931 |
| 18 | 1,000 | ..... | ..... | 1,000 | 0.01 |
| 16 | 235,064 | ..... | 31 | 235,095 | 4.42775 |
| 14 | 22,552 | ..... | ..... | 22,552 | 0.41122 |
| 12 | 493,615 | 300 | 21,308 | 514,623 | 9.72463 |
| 10 | 26,860 | ..... | ..... | 26,860 | 0.5186 |
| 8 | 1,755,817 | 1,061 | 108,709 | 1,863,465 | 35.24385 |
| 6 | 4,464,793 | 108 | 295,435 | 4,760,120 | 90.12848 |
| 4 | 1,092,867 | 14,823 | 5,099 | 1,083,143 | 20.5743 |
| 3 | 8,996 | ..... | ..... | 8,996 | 1.3716 |
| Total in feet..... | 8,513,300 | 16,292 | 432,602 | 8,929,610 | ..... |
| Total in miles.... | 1,612.1248 | 3.452 | 81.4222 | 1,691.1133 | 1,691.1133 |

Amount of wooden pipe in use in Norwood Park, 16,618 feet of 4-inch and 325 feet of 6-inch, not included in above.



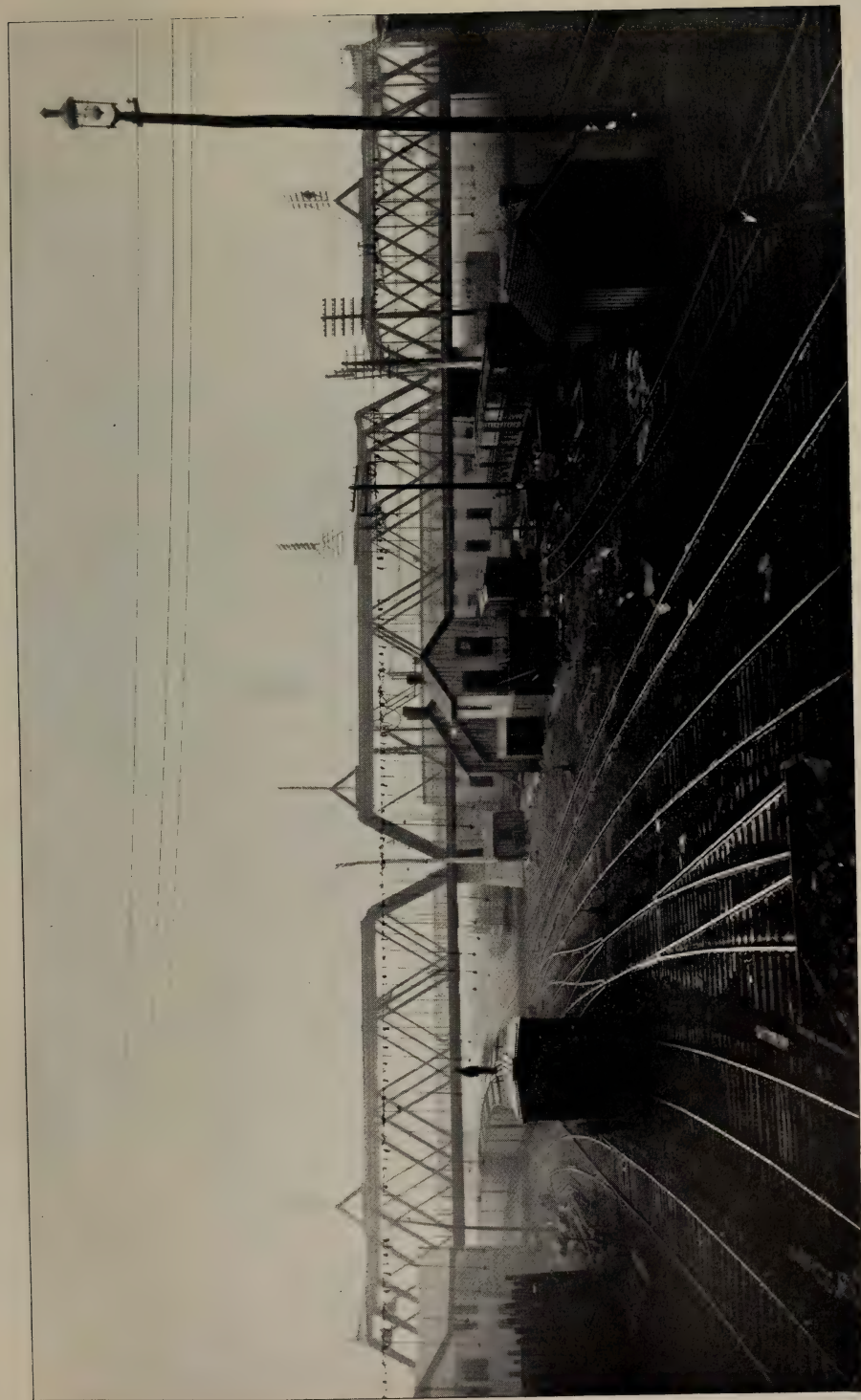
PLAT OF SOUTH HALSTED-ST. VIADUCT
OVER THE TRACKS OF THE
UNION STOCK YARDS AND TRANSIT CO. R. R.
1896



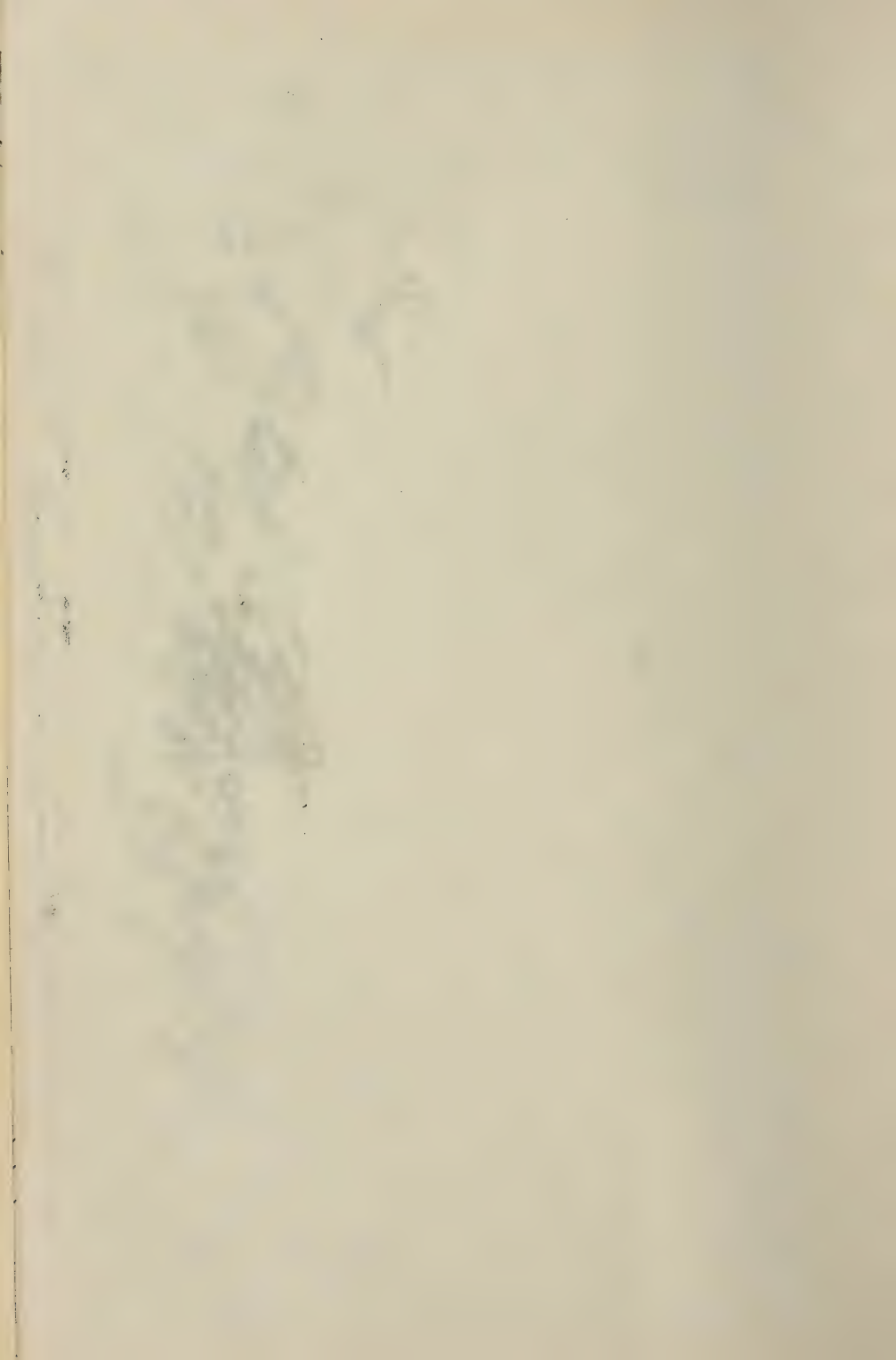


SOUTH HALSTED STREET VIADUCT

(OVER THE TRACKS OF THE UNION STOCK YARDS AND TRANSIT COMPANY.)



SOUTH HALSTED STREET VIADUCT



DIVISION OF BRIDGE AND VIADUCT CONSTRUCTION.

MR. A. G. RITER, Bridge Engineer, in charge.

DIVERSEY AVENUE BRIDGE.

This bridge, which was fully described in the 1895 report, was opened for traffic January 11, 1896—work having been commenced on the 10th of July, 1895. The total cost was paid by the City, \$34,345.10.

WELLS STREET BRIDGE.

Built in 1888, this is one of the City's most important bridges and during the year has been altered to a double deck structure by and entirely at the expense of the Northwestern Elevated Railroad Company. The work done comprised the placing of a new set of steel rollers, new plate girder drum, new center step and distributing girder and the removal of all of the web members in the seven center panels of all three trusses, and the substitution therefor of new and adequate web members of steel, while an upper deck of steel floor beams and stringers was put in to carry the ties and rails of the "L" road. The old roadway was partially replanked and newly paved, with seven and one-half inch cedar blocks. The old steam plant was removed and replaced by a strictly modern electrical plant.

The Company also built a new house for the bridge-tender.

The bridge was closed to traffic on July 5th and reopened September 20, 1896, during which period foot bridges of a unique and successful design were maintained—all work having been done by Messrs. Shailer & Schnigla, of this City.

WELLS STREET VIADUCT.

To act in connection with Wells street bridge, this Division has prepared plans and specifications for a new double roadway, double deck viaduct span, to take the place of the present pony truss span at Wells street depot. The entire cost will be borne by the Northwestern Elevated Railroad Company and the Chicago & Northwestern Railway Company, the span to be erected early in 1897.

SOUTH HALSTED STREET VIADUCT.

This structure spans the tracks of the Union Stock Yards and Transit Company at Fortieth street, and consists of three double roadway spans; entire width 60 feet, two spans 136 feet and one span 100 feet. (See inset.)

The entire cost of this structure was paid by the Union Stock Yards & Transit Company and the Chicago City Railway Company, and was as follows:

| | |
|--|--------------------|
| John Ruddy, substructure..... | \$48,271 05 |
| C. L. Strobel, superstructure | 31,834 20 |
| Engineering, inspection, etc..... | 2,663 87 |
| Sundries, advertising, blue prints, etc..... | 825 00 |
| Total cost..... | <u>\$83,594 12</u> |

All time records for construction of City structures of similar size were broken on this work; excavation for substructure having been commenced on Tuesday, February 18th, and the viaduct opened for traffic on September 5, 1896, at three o'clock, p. m.

NORTH HALSTED STREET BRIDGE.

This bridge is of the Scherzer rolling bascule type, similar to the Van Buren street and Metropolitan "L" road bridges, and with a 50-foot plate girder deck span constitutes the continuation northward of the Chicago avenue-Halsted street viaduct. The structure is 34 feet centers of trusses, with two 6-foot sidewalks. The trolley tracks are in the center of the roadway, with team space on both sides.

The structure is operated by electricity and compressed air, and is our most modern structure.

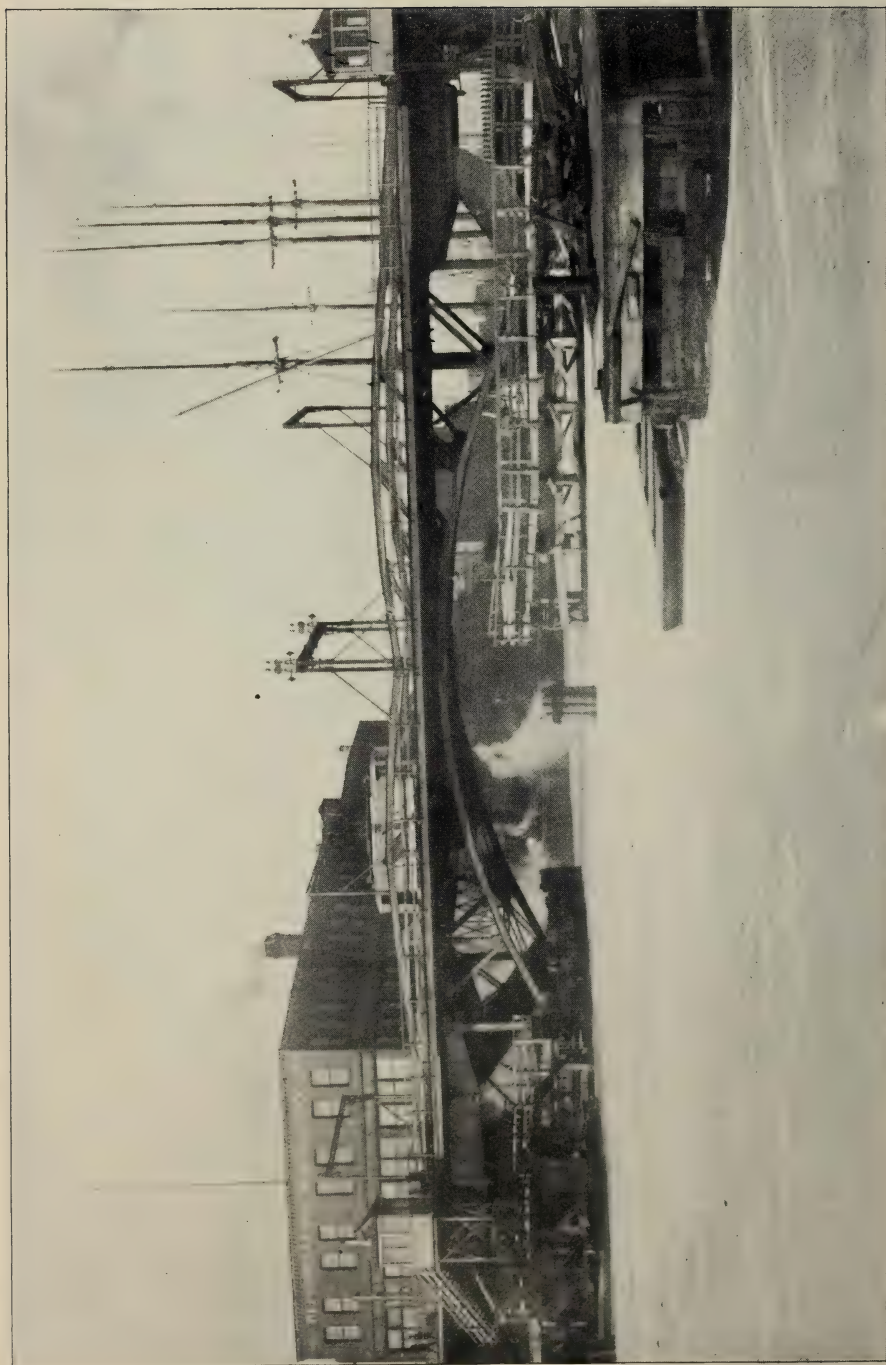
Work was commenced January 22, 1896, and the bridge will be opened for traffic early in January, 1897.

The cost will be about \$114,000.00, of which the City pays 75 per cent. and the North Chicago Street Railway Company 25 per cent.

The division of cost is as follows:

| | |
|---|---------------------|
| Wilson & Jackson, substructure | \$46,572 12 |
| King Bridge Company, superstructure | 44,200 00 |
| Vulcan Iron Works, machinery, electrical equipment, etc | 13,567 47 |
| Foot bridge, repair department, labor, etc | 2,585 58 |
| Engineering, inspection and sundries | 3,900 00 |
| Total to date..... | <u>\$110,825 17</u> |

The extra work, repairs and various expenses incidental to putting all in readiness for traffic, will in all probability bring the total up to the sum first named.



NORTH HALSTED STREET NORTH BRANCH BRIDGE

(SIDE VIEW FROM THE EAST)



NORTH HALSTED STREET NORTH BRANCH BRIDGE

NEW STRUCTURES WANTED.

The City is in urgent need of new bridges and viaducts at the following points :

1. Kinzie street, North Branch.
2. North avenue, North Branch.
3. Division street, North Branch.
4. Division street, Ogden Canal.
5. Clybourn place, North Branch.
6. Western avenue, west fork of South Branch.
7. California avenue, west fork of South Branch.
8. Polk street, South Branch.
9. Archer avenue, south fork of South Branch.
10. Chittenden avenue, Calumet River.
11. Kedzie avenue, Illinois and Michigan Canal (fixed span).
12. Canal and Sixteenth street (viaduct).

In the case of the bridges at North avenue and the two places on Division street, it would be seen by reference to the laws and ordinances, clause 3,513 et seq., page 959, that the North Chicago Street Railway Company is compelled to pay one-half of the cost of the construction of these bridges—the ten year clause in which ordinance makes the funds available in the spring of 1897.

ST. CLAIR STREET BRIDGE AND VIADUCT.

Work is being done as fast as data can be collected on a plat and general plan for the bridge and viaduct to connect the Lake Front park with the North Shore drive.

MISCELLANEOUS.

This Division prepared plans for the new light-house tower and lantern for the new Sixty-eighth street crib, and superintended the erection of the same. Also beams and column spans for the new City repair shops at Ashland avenue and Twenty-second street, for the City Architect. Plans and specifications have also been prepared for the west half of the protection, and a complete electrical equipment for the Fullerton avenue bridge.

This Division also furnished plans and supervision for the new City dump, on the lake front, for the Bureau of Street and Alley Cleaning. The work of supervising the erection of the elevated railroads and loop has been a portion of the duties of this Division, and together with the usual miscellaneous work of preparing plans, plats and data for various projects, has constituted the work of the Division for 1896.

BRIDGE AND VIADUCT MAINTENANCE.

COL. L. B. FULLER is Superintendent and MR. J. E. ROEMHELD is Engineer of Bridge and Viaduct repairs.

There are sixty-three bridges and forty-one viaducts operated and maintained by the City of Chicago.

Fifty of the sixty-three bridges are movable structures; seven are fixed spans over the Illinois and Michigan canal and west fork of the South branch; and six are fixed spans over the unnavigable portion of the North branch of the Chicago river. Among the highway bridges are two folding, or jack-knife bridges; one lift bridge; two combination railway and highway bridges; and two bascule or rolling lift bridges. Five of these bridges are operated by electric power, twelve by steam power and the remainder by hand power. One new bridge has been added to the list this year, viz: North Halsted street, bascule, to replace the old hand-power bridge.

In this synopsis, mention will only be made of the most essential repairs. Guided by the principles of economy in the expenditure of a limited appropriation, I have endeavored to keep the bridges and viaducts in a general, fair and safe condition, but in many instances the repairs could not be made as extensively as desired owing to insufficient funds. Notwithstanding, I wish to express my sincere thanks to my superior officers for sustaining me by their prompt aid and decision in the performance of my duty.

Below please find statement of expense of repairs and maintenance of each bridge and viaduct.

BRIDGES.

| | |
|------------------------------------|-------------|
| Adams street bridge..... | \$ 2,072 28 |
| Ashland avenue bridge, river | 175 97 |
| Ashland avenue bridge, canal..... | 12,372 58 |
| Archer avenue bridge..... | 912 90 |
| Belmont avenue bridge | 6 40 |
| Chittenden street bridge | 12 00 |
| Clark street bridge..... | 3,960 60 |
| Chicago avenue bridge..... | 352 12 |
| Canal street bridge | 2,398 05 |
| Clybourn place bridge..... | 273 06 |
| Dearborn street bridge.... | 2,806 91 |
| Deering street bridge | 129 40 |
| Division street bridge, river..... | 344 32 |
| Division street bridge, canal..... | 219 67 |
| Erie street bridge | 244 37 |
| Fullerton avenue bridge | 318 02 |

| | |
|--|--------------|
| Fuller street bridge | \$ 1,447 03 |
| North Halsted street bridge, river..... | 651 25 |
| North Halsted street bridge, canal | 3,036 95 |
| South Halsted street bridge..... | 5,806 59 |
| Harrison street bridge | 2,395 91 |
| Indiana street bridge | 552 27 |
| Jackson street bridge | 3,591 58 |
| Kinzie street bridge..... | 1,293 64 |
| Laurel street bridge..... | 692 55 |
| Lake street bridge | 3,518 89 |
| Madison street bridge..... | 3,672 36 |
| Main street bridge | 901 82 |
| North Western avenue bridge..... | 574 23 |
| North avenue bridge..... | 1,751 35 |
| Polk street bridge..... | 1,232 77 |
| Rush street bridge | 5,322 33 |
| Randolph street bridge | 1,514 97 |
| Riverdale bridge..... | 740 36 |
| State street bridge..... | 1,227 35 |
| Taylor street bridge..... | 1,047 04 |
| Van Buren street bridge | 4,314 74 |
| Webster avenue bridge..... | 646 59 |
| Weed street bridge..... | 337 40 |
| Crawford avenue bridge | 72 25 |
| Wells street bridge..... | 767 29 |
| Washington street bridge | 745 26 |
| Western avenue bridge | 209 45 |
| Diversey avenue bridge..... | 248 16 |
| Twelfth street bridge | 3,125 80 |
| Eighteenth street bridge..... | 3,059 42 |
| Twenty-second street bridge | 141 97 |
| Thirty-fifth street bridge | 860 11 |
| Ninety-second street bridge..... | 1,015 42 |
| Ninety-fifth street bridge | 1,043 10 |
| 106th street bridge | 65 80 |
| Kedzie avenue bridge..... | 166 20 |
| General bridges..... | 17,982 43 |
| | <hr/> |
| | \$102,371 28 |

VIADUCTS.

| | |
|--|-----------|
| Ashland avenue viaduct | \$ 235 87 |
| Clark street viaduct..... | 28 20 |
| Dearborn street viaduct..... | 393 45 |
| Indiana street viaduct | 75 75 |
| Desplaines street viaduct | 3,827 18 |
| Halsted street and Chicago avenue viaduct... | 85 30 |
| Madison street viaduct..... | 206 80 |
| Lake street viaduct | 870 18 |
| Polk street viaduct..... | 39 60 |

| | |
|--|--------------|
| Randolph street viaduct..... | \$ 455 98 |
| Taylor street viaduct | 103 23 |
| Thirty-fifth street viaduct | 481 03 |
| Adams street viaduct | 690 75 |
| Sangamon street viaduct | 286 05 |
| Milwaukee avenue viaduct | 11,163 45 |
| Canal and Sixteenth streets viaduct | 504 59 |
| Eighteenth street viaduct | 1,943 24 |
| Twelfth street viaduct | 1,925 94 |
| Washington street viaduct | 1,079 35 |
| Wells street viaduct..... | 15 61 |
| North Western avenue viaduct..... | 208 51 |
| Jackson street viaduct | 830 55 |
| Center avenue viaduct | 102 90 |
| | <hr/> |
| | \$127,924 79 |
| Stock on hand at shops (Eighteenth and Lake streets)..... | 4,848 34 |
| | <hr/> |
| | \$132,773 13 |

The most extensive repairs have been made, as follows :

Rush Street Bridge.—An entirely new and substantial masonry approach, with retaining wall, cement sidewalk and iron railing, was built at the south approach to replace the old and decayed wooden trestle.

State Street Bridge.—The entire floor system of roadway was repaved; also extensive repairs were made to center pier protection.

Dearborn Street Bridge.—Floor system was reconstructed for electric car service. The protection for center pier has been entirely rebuilt and bridge painted.

Clark Street Bridge.—The old and worn cast-iron turntable wheels of this bridge were removed and a new set of cast-steel wheels substituted. The new wheels were two inches larger in diameter than the old ones and the bridge had to be raised accordingly. By means of the interlocking wedge system, an invention of Assistant Engineer Roemheld, of this Department, the bridge was raised by its own power two and one-half inches in less than ten minutes. Not a jack-screw or stick of timber were used. This was accomplished with a delay of traffic of less than four hours, and a saving to the City of more than a thousand dollars.

Wells street bridge was dismantled of steam plant, rolling gear and turntable, and completely rebuilt for electric railway service. This expense was borne by the Northwestern Elevated Railway Company.

Lake Street Bridge.—Entire new floor, consisting of sub-planking and repaving.

Randolph Street Bridge.—East approach was reinforced.

Madison Street Bridge.—New floor system.

Jackson Street Bridge.—New chord covering for the entire structure.

Van Buren Street Bridge.—Bascule bridge; the entire electrical plant has been reorganized. Operators' houses have been removed from center of roadway and new, substantial ones rebuilt on outer edge of sidewalk, where operator can command a full view of river and roadway simultaneously. Arrangements have been made with the West Chicago Street Railway Company to supply power for the operating of bridge at one-quarter of the former cost, a saving to the City of \$1,800.00 per annum. The center-locking device, which makes a rigid span of the structure, has been out of order for over a year, and by various alterations was put into successful operation.

Harrison Street Bridge.—West approach was entirely rebuilt.

Eighteenth Street Bridge.—New floor. The old turntable wheels of this bridge were removed and new wheels substituted. The work was done by the interlocking wedge system, with a delay to traffic of only four hours, and a saving to the City of about \$1,000.00.

Twelfth Street Bridge.—The machinery and boiler have been thoroughly overhauled. The center pier protection was rebuilt.

Canal Street Bridge.—Has been repeatedly out of service, owing to the failure of machinery, which consists of a sprocket and chain arrangement, and by which it has been found impossible to keep the bridge in operation any length of time without making extensive repairs. Alterations are now in progress, by which a pinion and quadrant of rack will be substituted.

South Halsted Street Lift Bridge has been completely overhauled in its mechanical parts, and counterweights adjusted, whereby it can now be operated by one engine, saving a large expense in coal.

Main Street Bridge.—A new set of wheels for turntable and tracks have been provided for this bridge, and will be placed in position as soon as possible.

Ashland Avenue Canal Bridge.—New abutment and retaining wall on the north side. New floor and sidewalk for the entire bridge.

South Western Avenue Bridge.—Repairs to floor and trusses.

Laurel Street Bridge.—New floor system and sidewalks.

Ninety-second Street Bridge.—Piles for new protection pier have been driven.

Chittenden Street Bridge.—Lumber for new structure provided, but owing to controversy in regard to location, nothing further has been done.

Riverdale Bridge.—Bridge rebuilt.

Erie Street Bridge.—New circle at both ends.

Chicago Avenue Bridge.—New wheel bents.

North Halsted Street Canal Bridge.—New approach on north side of bridge; new pinion and racks. Two story brick bridge house moved to accommodate new location of bridge.

Weed Street Bridge.—New cables and pinion.

North Avenue Bridge.—New center protection.

Milwaukee Avenue Viaduct.—Repairs to trusses; new floor and sidewalk; both roadways repaved and completely rebuilt in floor system for electric car service, and plank roadway replaced by pine paving.

Desplaines Street Viaduct.—New floor, sidewalk and railing repaired.

Canal and Sixteenth Street Viaduct.—Twelve timber bents, chord covers, and a portion of the floor being replaced.

Archer Avenue Bridge.—New approaches on both sides of bridge, and repairs now in progress on center pier.

Polk Street Bridge.—New sidewalks and repairs to sidewalk on west viaduct.

Taylor Street Viaduct.—Extensive repairs to sidewalk on west side of river.

Twelfth Street Viaduct.—Extensive repairs made to the roadway and sidewalk on the system of viaducts from Canal street to Wabash avenue.

Thirty-fifth Street Viaduct.—Roadway and sidewalks repaired.

In addition, the following bridges and viaducts have been painted during the year:

Adams street bridge,
Adams street viaduct,
Jackson street bridge,
Jackson street viaduct,
Fullerton avenue bridge,
State street bridge,
Halsted street canal viaduct,
Madison street bridge,

Washington street viaduct,
Randolph street viaduct,
Lake street viaduct,
Milwaukee avenue viaduct and
railing to approach,
Desplaines street viaduct and
railing to approach.

| BRIDGES. | SUPERSTRUCTURE. | | | | | | |
|------------------------|-----------------|---------------|------------|-------------|-------|---------------------|-----------|
| | Length. ft. | Width. ft. | Operation. | Material. | Date. | Contractors. | Cost. |
| Rush Street. | 211 | ..... | Hand | Iron | 1856 | Harper & Tweedale | \$ 54,000 |
| “ “ rebuilt | 211 | ..... | “ | Wood | 1864 | Fox & Howard | 8,900 |
| “ “ “ | 211 | 33 | “ | Iron | 1872 | Detroit Bridge Co. | 15,600 |
| “ “ “ | 240 | 59 | Steam | “ | 1884 | Rust & Coolidge | 49,370 |
| State Street | 184 | 35 | Hand | Wood | 1864 | Fox & Howard | 32,000 |
| “ “ rebuilt | 184 | 36 | “ | Iron | 1872 | Keystone Bridge Co. | 22,500 |
| “ “ “ | 184 | 39 | Steam | Steel | 1887 | A. Gottlieb & Co. | 24,440 |
| Dearborn Street..... | 60 | ..... | Hand | Wood | 1834 | ..... | ..... |
| “ “ | 190 | 35.5 | Steam | Iron | 1872 | Fox & Howard | 22,820 |
| Clark Street..... | ..... | ..... | ..... | Wood | 1840 | ..... | 3,000 |
| “ “ ..... | ..... | ..... | Hand | “ | 1857 | Chapin & Co. | ..... |
| “ “ rebuilt | 180 | 32 | “ | Combination | 1866 | Thos. Mackin | 14,200 |
| “ “ “ | 180 | 37.5 | “ | “ | 1872 | Fox & Howard | 32,000 |
| “ “ “ | 215 | 59 | Steam | Steel | 1889 | Variety Iron Works | 69,875 |
| Wells Street..... | ..... | ..... | ..... | Wood | 1840 | ..... | 3,000 |
| “ “ rebuilt | 190 | ..... | Hand | “ | 1856 | Harper | ..... |
| “ “ “ | 190 | 35 | “ | “ | 1862 | Fox & Howard | 5,290 |
| “ “ “ | 190 | 35.25 | “ | Iron | 1872 | “ “ | 22,820 |
| “ “ “ | 220 | 59 | Steam | Steel | 1888 | Keystone Bridge Co. | 86,750 |
| Lake Street ..... | ..... | ..... | ..... | Wood | 1849 | ..... | ..... |
| “ “ rebuilt | 185 | ..... | Hand | “ | 1859 | N. Chapin | ..... |
| “ “ “ | 185 | 33 | “ | Combination | 1868 | Fox & Howard | 11,450 |
| “ “ “ | 220 | 59 | Steam | Iron | 1885 | Detroit Bridge Co. | 57,533 |
| Randolph Street ..... | ..... | ..... | ..... | Wood | 1849 | ..... | ..... |
| “ “ rebuilt | 153 | 32.5 | Hand | “ | 1864 | L. B. Boomer | 5,000 |
| “ “ “ | 157 | 34 | Steam | Iron | 1874 | Keystone Bridge Co. | 10,850 |
| Washington Street..... | 157 | 31.5 | “ | “ | 1875 | American Bridge Co. | 11,495 |

BRIDGES—MARCH, 1897.

| SUBSTRUCTURE. | | | APPROACHES. | REMARKS. |
|---------------------------------------|----------------------------------|--------------------------------|------------------|--|
| Material. | Contractors. | Cost. | Type. | |
| Stone on piles | Harper & Tweedale | Included in super. contract | Curb and filling | |
| " " | Old work repaired | ..... | " " | Burned in fire of 1871. |
| " " | Detroit Bridge Co. | \$ 8,874 | " " | Destroyed by collision with schooner "Granger," Nov. 22, 18 |
| Concrete and ma- sonry on piles | FitzSimons & Connell Co. | 70,674 | " " | |
| Piles | Fox & Howard | Included in super. contract | " " | Burned in fire of 1871. |
| Masonry on piles | Keystone Bridge Co. | \$ 27,000 | " " | New turn-table built in 1880 by Keystone Bridge Co.; cost, \$2,5 |
| " " | Old work repaired | ..... | Viaduct | |
| Piles | | | | This was the first draw-bridge bu over the Chicago river. |
| Masonry on grill- age | 1888 FitzSimons & Connell Co. | 30,000 | Viaduct | Superstructure erected at Wel street moved in 1888. |
| Piles | | | | Swept away by flood of 1849. |
| " | Chapin & Co. | ..... | Curb and filling | Substructure repaired 1871, by Ea shaw & Goble; cost, \$4,000. |
| " | Old work repaired | ..... | " " | Burned in fire of 1871. |
| " | Fox & Howard | Included in super. contract | " " | Superstructure moved to Webs avenue in 1889. |
| Concrete and ma- sonry on piles | FitzSimons & Connell Co. | \$ 62,500 | " " | North Chicago Street Railway paid all. |
| Piles | | | | |
| " | Harper | | Curb and filling | |
| " | Old work repaired | ..... | " " | Burned in fire of 1871. |
| Masonry on piles | Fox & Howard | 26,182 | " " | Superstructure moved to Dearbo street in 1888. |
| Concrete and ma- sonry on piles | FitzSimons & Connell Co. | 59,000 | " " | N. C. St. Ry. Co. paid all. Double decked and reinforced Northwestern Elevated R. R. in 18 |
| Piles | | | | The first means for crossing the C ago river was a ferry, located the site of the present Lake stre bridge, first established in 1829 |
| Center pier piles; abutments stone | N. Chapin | | Girder | |
| " " | Old work repaired | ..... | " " |  |
| Concrete and ma- sonry on piles | FitzSimons & Connell Co. | 69,726 | " " | Double decked and reinforced Lake St. Elevated R. R. in 1893 |
| Piles | | | | A crossing was constructed of rou logs near the site of the prese Randolph street bridge in 18 which was used until 1840. |
| " | L. B. Boomer | Included in super. contract | Curb and filling | |
| " | Old work repaired | ..... | " " |  |
| Masonry and con- crete | FitzSimons & Connell Co. | \$ 46,099 | Girder | Substructure paid for by West Ch icago Street Railway Co.; supe structure erected at Madiso street moved in 1891. |

CHICAGO

| BRIDGES. | SUPERSTRUCTURE. | | | | | | |
|----------------------------|-----------------|---------------|-------------------|-------------------|-------|--------------------------|-----------|
| | Length, ft. | Width, ft. | Operation. | Material. | Date. | Contractors. | Cost. |
| Madison Street..... | ..... | ..... | ..... | Wood | 1849 | ..... | ..... |
| “ “ rebuilt | 155 | ..... | Hand | Iron | 1857 | Gaylord | \$ 42,000 |
| “ “ “ | 157 | 31.5 | Steam | “ | 1875 | American Bridge Co. | 11,495 |
| “ “ “ | 197 | 52 | “ | Steel | 1891 | Riter & Conley | 52,500 |
| Adams Street | 160 | 31 | Hand | Combination | 1869 | Fox & Howard | 37,860 |
| “ “ rebuilt | 160 | 32 | “ | Iron | 1872 | Keystone Bridge Co. | 14,880 |
| “ “ “ | 259 | 59 | Steam | Steel | 1889 | King Bridge Co. | 68,500 |
| Jackson Street | 280 | 59 | “ | “ | 1888 | Detroit Bridge Co. | 76,500 |
| Van Buren Street | 163 | ..... | Hand | Combination | 1867 | Fox & Howard | 13,470 |
| “ “ rebuilt ... | 163 | 34 | “ | “ | 1872 | E. Sweet, Jr. & Co. | 13,200 |
| “ “ | 115 | 59 | Electric power | Steel | 1895 | C. L. Strobel | 87,175 |
| Harrison Street | 175 | 31 | Hand | Iron | 1877 | American Bridge Co. | 24,875 |
| Polk Street..... | 154 | 31 | “ | Combination | 1869 | Fox & Howard | 29,450 |
| “ “ rebuilt | 154 | 31 | “ | Iron | 1872 | King Iron Bridge Co. | 12,625 |
| Taylor Street | 161.4 | 32 | “ | “ | 1872 | Keystone Bridge Co. | 14,880 |
| Twelfth Street | 202 | 32.75 | “ | Combination | 1868 | Fox & Howard | 44,450 |
| “ “ rebuilt | 220 | 59 | Steam | Steel | 1886 | Chicago Forge & Bolt Co. | 41,159 |
| Eighteenth Street..... | 175 | 32 | Hand | Combination | 1868 | Fox & Howard | 28,500 |
| “ “ rebuilt... | 186.5 | 35 | “ | Iron and steel | 1888 | King Bridge Co. | 21,500 |
| Canal Street..... | 200 | 35 | “ | Howe truss | 1891 | A. Gottlieb & Co. | 11,989 |
| “ “ | 100 | 35 | Steam | Steel | 1893 | Shailer & Schniglaue | ..... |
| Twenty-second Street..... | 210 | 32 | Hand | Combination | 1871 | Fox & Howard | 26,900 |
| Archer Avenue (Ogden Slip) | 115 | 40 | “ | “ | 1871 | “ “ | 15,000 |
| South Halsted Street | 150 | 31.25 | “ | Wood | 1861 | “ “ | 8,500 |

BRIDGES—MARCH, 1897.—CONTINUED.

| SUBSTRUCTURE. | | | APPROACHES. | REMARKS. |
|---------------------------------------|---------------------------|--------------------------------|-------------------------------------|---|
| Material. | Contractors. | Cost. | Type. | |
| Piles | ..... | ..... | ..... |  |
| Masonry on piles | Gaylord | Included in super. contract | Curb and filling | |
| Repaired | American Bridge Co. | \$ 3,505 | " " | Superstructure moved to Wash- ton street in 1891. |
| Concrete and ma- sonry on piles | Fitz Simons & Connell Co. | 52,000 | Girder, curb and filling | |
| Center pier piles; abutments stone | Fox & Howard | Included in super. contract | " | Burned in fire of 1871. |
| Masonry on piles | " " | \$ 31,264 | " | Superstructure moved to Tay street in 1889. |
| Concrete and ma- sonry on piles | Fitz Simons & Connell Co. | 54,721 | " | |
| " " | " " | 49,807 | Viaduct | |
| Center pier piles; abutments stone | Fox & Howard | 4,800 | Curb and filling | Burned in fire of 1871. |
| Masonry on piles | E. Sweet, Jr. & Co. | Included in super. contract | " " | |
| " " | Fitz Simons & Connell Co. | \$ 82,525 | Old approaches, slightly altered | First bridge of the Scherzer roll- type. The Metropolitan Elevat- R. R. Co. contributed \$45,000. |
| Piles | American Bridge Co. | Included in super. contract | Curb and filling | |
| " | Fox & Howard | " | Viaduct and girders | |
| Masonry on piles | E. Sweet, Jr. & Co. | \$ 23,970 | " " | East abutment rebuilt in 1882 E. F. Gobel & Co.; cost, \$8,573. |
| Concrete and ma- sonry on piles | Chicago D. & D. Co. | 25,500 | Viaduct | Substructure built at expense West Chicago Street Railway Co. Superstructure built at Adam street moved in 1889. |
| Masonry on piles | Fox & Howard | Included in super. contract | Curb and filling | |
| Concrete and ma- sonry on piles | Fitz Simons & Connell Co. | \$ 59,851 | Viaduct | |
| Piles | Fox & Howard | Included in super. contract | Viaduct, curb and filling | |
| Concrete and ma- sonry on piles | Chicago D. & D. Co. | \$ 41,288 | " | |
| Piles | " " | 7,141 | Timber | Removed to Belmont avenue in 18 (Condemned by U. S. Govt. as obstruction to navigation.) |
| Masonry on piles | Shailer & Schniglan | ..... | Timber trestles | Lift bridge, Harmon's patent. T- tal cost, \$46,844.90. |
| Piles | Fox & Howard | Included in super. contract | Curb and filling | |
| " | " " | " | Timber | Removed, and slip filled by C. S. & C. R. R. |
| " | " " | " | Curb and filling | |

CHICAGO

| BRIDGES. | SUPERSTRUCTURE. | | | | | | |
|------------------------------|-----------------|---------------|------------|-------------|-------|-----------------------------|-----------|
| | Length, ft. | Width, ft. | Operation. | Material. | Date. | Contractors. | Cost. |
| South Halsted Street rebuilt | 150 | 33 | Hand | Iron | 1872 | King Iron Bridge Co. | \$ 15,900 |
| “ “ “ | 130 | 61.4 | Steam | Steel | 1895 | Pittsburg Bridge Co. | ..... |
| Main Street (Throop)..... | 152 | 29 | Hand | Combination | 1868 | Fox & Howard | 12,450 |
| Deering Street | 200 | 30 | “ | Iron | 1889 | Shailer & Schniglaui | 17,080 |
| Ashland Ave. (West Fork). | 160 | 20.5 | “ | “ | 1883 | Detroit Bridge Co. | 10,500 |
| South Western Avenue..... | 125 | 21.3 | “ | Combination | 1869 | F. E. Canda | 13,000 |
| Fuller Street | 125 | 19.5 | “ | Wood | 1865 | N. Chapin & Co. | 7,500 |
| “ “ rebuilt | 127 | 19.5 | “ | Combination | 1877 | G. W. James | 4,210 |
| Archer Avenue..... | 152 | 28.75 | “ | “ | 1870 | Fox & Howard | 11,500 |
| Douglas Avenue | 141.5 | 21.3 | “ | “ | 1874 | “ “ | 9,800 |
| “ “ rebuilt (35th st.) | 170 | 35 | “ | Howe truss | 1891 | Shailer & Schniglaui | 10,545 |
| Ashland Ave. (South Fork) | 152 | 18.5 | “ | Wood | 1871 | Fox & Howard | 5,000 |
| “ “ (canal) | 128 | ..... | Fixed | Iron | 1886 | Pittsburgh Bridge Co. | 3,622 |
| Western Avenue (canal) ... | ..... | ..... | “ | Wood | 1870 | C. Fitz Simons | 1,840 |
| “ “ rebuilt | 118 | 18 | “ | Iron | 1882 | Massillon Bridge Co. | 5,900 |
| Kedzie Avenue (canal)..... | 108 | ..... | “ | “ | 1879 | “ “ | 2,879 |
| “ “ (West Fork) | 109 | 16 | “ | “ | 1881 | “ “ | 3,765 |
| Crawford Avenue ..... | ..... | ..... | “ | Wood | ..... | ..... | ..... |
| Laurel Street..... | 154 | 33 | Hand | Iron | 1888 | Chicago Forge & Bolt Co. | ..... |
| Kinzie Street | 170 | 31.5 | “ | Combination | 1870 | Fox & Howard | 15,850 |
| Indiana Street | 163 | 32 | “ | “ | 1869 | “ “ | 48,800 |
| Erie Street | 200 | 32 | “ | “ | 1871 | “ “ | 30,000 |
| Chicago Avenue..... | 175 | 32 | “ | “ | 1867 | “ “ | 26,700 |
| “ “ rebuilt | 175 | 32.5 | “ | “ | 1872 | “ “ | 20,850 |
| North Halsted Street..... | 140 | 20 | “ | Wood | 1866 | “ “ | 7,000 |
| “ “ “ rebuilt. | 140 | ..... | “ | Combination | 1877 | W. B. Howard | 4,190 |

BRIDGES—MARCH, 1897.—CONTINUED.

| SUBSTRUCTURE. | | | APPROACHES. | REMARKS. |
|------------------------------------|--------------------------|-----------------------------|----------------------------------|---|
| Material. | Contractors. | Cost. | Type. | |
| Piles | Old substructure used | ..... | Timber | Demolished by collision, steamer Tioga, June 30, 1892. |
| Masonry to bed rock | Pittsburg Bridge Co. | ..... | Old approaches, slightly altered | First, and only bridge of Waddell lift type. Total cost \$237,180.52 complete. |
| Piles | Fox & Howard | Included in super. contract | Timber | |
| " | Chicago D. & D. Co. | \$ 9,964 | " | |
| " | Harry Fox & Co. | 6,302 | " | |
| " | F. E. Canda | Included in super. contract | " | |
| " | N. Chapin & Co. | " | " | Blown down by storm of May 1876. |
| " | Old abutments repaired | ..... | Curb, filling and timber | |
| " | Fox & Howard | Included in super. contract | Timber | |
| " | " " | " | " | |
| " | Kimbell & Cobb Stone Co. | \$ 10,227 | " | |
| " | Fox & Howard | Included in super. contract | " | |
| " | Pittsburg Bridge Co. | " | " | |
| " | C. Fitz Simons | " | Filling | |
| Stone | Massillon Bridge Co. | \$ 1,021 | " | |
| " | " " | Included in super. contract | " | |
| Wood | " " | \$ 634 | " | Old wooden bridge here destroyed by flood of 1881. |
| Piles | ..... | ..... | " |  |
| " | ..... | ..... | Curb and filling | Built by Town of Lake before annexation in 1889. |
| " | Fox & Howard | Included in super. contract | Curb and filling, and timber | The first crossing over the North Branch was a float bridge constructed in 1832, near the site of the present Kinzie st. bridge, and used for foot passengers only. |
| Masonry on piles | " " | " | Viaduct and girder | |
| Center pier piles; abutments stone | " " | " | Viaduct and curb, and filling | Wooden float bridge until 1871. |
| Piles | " " | " | Curb and filling | Burned in fire of 1871. |
| " | " " | " | " | |
| " | " " | " | Timber | |
| " | Old work repaired | ..... | " | Substructure rebuilt in 1884 by Chicago Dredg. & Dock Co. cost, \$10,490. Bridge demolished to make room for new bridge in 1896. |

CHICAGO

| BRIDGES. | SUPERSTRUCTURE. | | | | | | |
|----------------------------|-----------------|---------------|----------------|-------------|-------|---------------------------|-----------|
| | Length, ft. | Width, ft. | Operation. | Material. | Date. | Contractors. | Cost. |
| North Halsted Street..... | 127 | 50 | Electric power | Steel | 1897 | King Bridge Co. | \$ 57,768 |
| “ “ “ (canal) | 228 | 32 | Hand | Iron | 1874 | Fox & Howard | 29,945 |
| Division Street | 180 | 29 | “ | Combination | 1869 | “ “ | 15,795 |
| “ “ (canal) | 176 | 29 | “ | “ | 1870 | “ “ | 17,700 |
| Weed Street (canal) | 150 | 33 | “ | Iron | 1891 | Shailer & Schniglaue | 8,296 |
| North Avenue..... | 145 | 19.5 | “ | Wood | 1865 | N. Chapin & Co. | 3,700 |
| “ “ rebuilt..... | 150 | 29 | “ | Combination | 1877 | Conro, Carlin & Co. | 7,149 |
| Clybourn Place..... | 140 | 32 | “ | “ | 1873 | Fox & Howard | 13,700 |
| Webster Avenue | 180 | 37.5 | “ | “ | 1872 | “ “ | 32,000 |
| Fullerton Avenue..... | 225 | 20 | Fixed | Wood | 1874 | “ “ | 1,490 |
| “ “ rebuilt.... | 125 | 20 | Hand | Combination | 1877 | I. W. Lavin & Co. | 2,978 |
| “ “ | 164.6 | 35.4 | “ | Steel | 1895 | Chicago Bridge & Iron Co. | 11,956.12 |
| Diversey Boulevard..... | 184.2 | 35.4 | “ | “ | 1896 | Lassig Bridge & Iron Co. | 14,961.58 |
| North Western Avenue | 266 | 36 | “ | Howe Truss | 1891 | Binder & Seifert | 14,000 |
| Belmont Avenue | 77.67 | 19.10 | Fixed | Iron | 1875 | King Bridge Co. | ..... |
| “ “ | 200 | 35 | Hand | Wood | 1893 | City | 7,773.37 |
| Irving Park Boulevard | 65.5 | 19.10 | Fixed | Iron | ..... | ..... | ..... |
| Montrose Boulevard ..... | ..... | ..... | “ | Combination | ..... | ..... | ..... |
| Rutledge Avenue ..... | ..... | ..... | “ | “ | ..... | ..... | ..... |
| Jefferson Avenue ..... | ..... | ..... | “ | Wood | ..... | ..... | ..... |
| Forest Glen Avenue..... | ..... | ..... | “ | “ | ..... | ..... | ..... |
| Carpenter Road ..... | ..... | ..... | “ | “ | ..... | ..... | ..... |
| Ninety-second Street..... | 200 | 34 | Hand | Iron | ..... | ..... | ..... |
| Ninety-fifth Street | 200 | 35 | “ | Howe Truss | 1891 | Chicago Forge & Bolt Co. | 13,350 |
| 106th Street..... | ..... | ..... | “ | Wood | ..... | ..... | ..... |
| Chittenden Road ..... | ..... | ..... | “ | “ | ..... | ..... | ..... |
| Riverdale ..... | ..... | ..... | ..... | “ | ..... | ..... | ..... |

BRIDGES—MARCH, 1897.—CONTINUED.

| SUBSTRUCTURE. | | | APPROACHES. | REMARKS. |
|------------------------------------|--------------------------|-----------------------------|---------------------------------|--|
| Material. | Contractors. | Cost. | Type. | |
| Masonry on piles | Wilson & Jackson | \$ 46,572.12 | Old approaches | Second rolling bascule bridge double roadway, two truss. Total cost about \$114,000, which the N. C. St. Ry. Co. paid 25 per cent. |
| Piles | Fox & Howard | Included in super. contract | Timber | |
| " | " " | " | " | |
| " | " " | " | " | |
| " | Shailer & Schniglau | " | " | Lift bridge, built under Capt. E. E. Monon's patents. |
| " | N. Chapin & Co. | " | " | |
| " | Old substructure used | ..... | " |  |
| " | Fox & Howard | Included in super. contract | " | A wooden bridge was built here 1862, by Fox & Howard; cost \$1,000. |
| " | Chicago D. & D. Co. | \$ 11,500 | " | Superstructure built at Clark moved in 1889. |
| " | Fox & Howard | Included in super. contract | " | |
| " | I. W. Lavin & Co. | " | " | Town of Lake View paid \$4, total cost, \$7,444. |
| Masonry on bed rock | FitzSimons & Connell Co. | \$ 15,796.67 | Timber trestles and paved fill. | Pratt truss. Electric power taken out on in 1897. N. C. St. Ry. contributed \$18,000. |
| Masonry on piles | Lydon & Drews Co. | 16,383.52 | " | Connects the north and west bed and yard systems. |
| Piles | Chicago D. & D. Co. | 18,706.00 | Timber | |
| Stone | ..... | ..... | Filling | Demolished to make room for bridge in 1893. |
| Piles and timber | Chicago D. & D. Co. | 19,259.19 | Timber trestles | Superstructure of first Canal bridge. Necessary real estate cost \$5,500 additional. |
| Stone | ..... | ..... | Filling | |
| " | | | " | |
| " | | | " | |
| " | | | " | |
| " | | | " | |
| " | | | " | |
| Pier, stone on piles; abuts. piles | ..... | ..... | Timber | |
| Piles | Kimbell & Cobb Stone Co. | 12,259 | " | |
| | | | | |
| ..... | ..... | ..... | ..... | Pontoon bridge. |
| | | | | |

Total length of bridge built by the City of Chicago, as far as the records go, 14,875.07 feet or 2.81 miles.

" existing bridges built by the City of Chicago, 8,760.90 feet or 1.66 mile.

" cost of all bridges built by the City of Chicago, as per available records, \$3,135,909.87.

TABLE OF VIADUCTS, GIVING LENGTHS, WIDTHS,

| LOCATION. | Character of Superstructure. | Length, ft. | Width, ft. | CHARACTER OF SUBSTRUCTURE. | CONTRACTOR SUBSTRUCTURE. |
|-----------------------------------|------------------------------|-------------|------------|---|--|
| State Street | Wrought iron | 304 | 59 | Masonry abutments, small piers with Phoenix columns | Unknown |
| Dearborn Avenue | Steel | 379.5 | 40 | Masonry abutments, small piers, with steel columns | M. C. & J. Duffy, \$13,191.43 |
| Clark Street | Wrought iron | 83 | 80 | Masonry abutments | Unknown |
| " " | Steel | 83 | 73 | Masonry abutments, old repaired | City \$1,368.91 |
| Wells Street | Wrought iron | 83 | 80 | Masonry abutments | Unknown |
| Indiana Street | Wood | 614 | 31.8 | Masonry piers and abutments | Unknown \$54,687.00 |
| " " | Iron | 613.07 | 38 | Old, repaired | City |
| Erie Street | Wood | 467 | 34 | Masonry piers and abutments | Unknown |
| " " | Iron | 463.37 | 38 | Old, repaired | City |
| Chicago Avenue and Halsted Street | " | 238 716 | 60 49 | Masonry piers and abutments and iron columns | Duffy & Sons |
| Lake Street | Wrought and Cast iron | 78.25 | 60 | Masonry abutments | Unknown |
| " " | Iron | 106.2 | 60 | Old, rebuilt | Fitz Simons & Connell \$12,880.70 |
| Randolph Street | Wrought and Cast iron | 81 | 60 | Masonry abutments | Unknown |
| Washington Street | Steel | 251 | 32 | Masonry abutments, small piers, steel columns | J. J. Duffy \$9,567.00 |
| Madison Street | Wrought and Cast iron | 98 | 60 | Masonry abutments | Unknown |
| " " | Steel | 128 | 59 | Concrete abutment, small piers east, steel columns | Fitz Simons & Connell |
| Adams Street | Iron | 306 | 33.5 | Masonry abutments, small piers, iron columns | Unknown |
| " " | " | 208.6 | 58 | Masonry abutments, small piers, concrete filled steel columns | City |
| Jackson Street | Steel | 359.3 | 58 | Masonry piers and abutments | Sackley & Peterson |
| Van Buren Street | Iron | 35 65 | 60 62 | Masonry abutments | Unknown |
| " " | Steel | 67 | 58 | Same, repaired | J. S. Patterson, sub-contractor \$1,238.00 |
| Harrison Street | Iron | 498.66 | 38 | Masonry piers and abutments | J. J. Kearns |
| West Polk Street | " | 346 | 33 | Same | E. F. Gobel |

MAIN APPROACHES, GRADIENTS, ETC.

| CONTRACTOR SUPERSTRUCTURE. | Date. | City Paid. | Railroads Paid. | Totals. | APPROACHES. | | | |
|---|--------------|--------------|--------------------|--------------|--------------------------------------|-------------------------------------|---|--|
| | | | | | Location. | Length, ft. | Gradient. | Character. |
| Keystone Bridge Co. | 1872 | ..... | ..... | \$ 29,840 00 | North South | 270 Bridge | 1:36 Level | C. W. with P. Bridge. |
| M. Lassig \$44,957.00 | 1889 | \$ 22,858 74 | \$ 40,000 00 | 62,858 74 | North South | 178 Bridge | 1:20 Level | C. W. with P. Bridge. |
| Keystone | 1872 | 24,277 43 | 14,730 00 | 39,007 43 | North South | 278.5 | 1:37.5 | C. W. with P. " |
| A. Gottlieb & Co. \$9,981.60 | 1892 | Nothing | All | 11,444 87 | North South | 394.7 168 | 1:37.3 for 210.7 1:100 for 184.0 1:40 | " " |
| Keystone | 1872 | 12,570 65 | Nothing | 12,570 65 | North South | 230 176 | 1:27.5 1:54 | " " |
| F. E. Canda \$23,010.00 | 1869 | ..... | ..... | 78,697 00 | West East | 228 Bridge | 1:24 Level | " Bridge. |
| Pittsburg Bridge Co. | 1888 | 54,491 39 | Nothing | 54,491 39 | West East | Same " | Same " | Same. |
| Fox & Howard | 1871 | 23,056 25 | " | 23,056 25 | West East | 350 Bridge | 1:26 Level | C. W. with P. Bridge. |
| Edw. Hemberle \$37,438.00 | 1885 | 45,000 00 | " | 45,000 00 | West East | Same " | Same " | Same. |
| Pittsburg Bridge Co. | 1884 | 149,637 50 | 135,696 91 | 285,334 41 | West East North South | 768 550 Bridge 758 | 1:40 1:30 Level 1:37 | W. E. and S. W. with P. I N. Bridge. |
| Keystone | 1872 | ..... | ..... | 13,505 00 | West East | 176 75 | 1:21.5 | C. W. with P. Same to Brid |
| Masillon Bridge Co. \$26,127.14 | 1887 | Nothing | 39,007 84 | 39,007 84 | West East | 230.4 75.53 | 1:23 1:37 | Same. " |
| Keystone | 1871 | ..... | 12,206 00 | 12,206 00 | West East | 268 76.28 | 1:70 1:40 | " Timber Trest |
| King Bridge Co. \$16,685.00 | 1890 | 20,237 63 | 6,014 37 | 26,252 00 | West East | 146 Bridge | 1:21 Level | C. W. with P. Bridge. |
| Keystone | 1866 | 15,675 00 | ..... | 15,675 00 | West East | 221 65.5 | 1:31.7 | C. W. with P. Same to Brid |
| Penn. Bridge Co. | 1891 | 11,200 00 | Nothing | 11,200 00 | West East | 222.75 48.75 Girder | 1:30.43 1:23.89 | Same. Girder Span to Brid |
| Keystone | 1869 | 25,883 87 | 19,000 00 | 44,833 87 | West East | 200 Bridge | 1:18.40 Level | C. W. with P. Bridge. |
| Keystone \$27,993.00 | 1885 | ..... | All | 33,462 40 | West East | Same Bridge | Same 1:115 | C. W. with P. Bridge. |
| Gottlieb \$75,700.00 | 1888 | 137,600 00 | 74,600 00 | 212,200 00 | West East Canal St. } S } N | 524.69 Bridge 306.66 355.0 | 1:35 Level 1:30.15 1:50.8 | C. W. with P. Bridge. C. W. with P. |
| American Bridge Co. | 1870 1880 | 3,275 00 | 4,440 56 | 7,715 56 | West East | 176 184 | 1:23 1:26.7 | " " |
| Chicago Bridge & Iron Co. \$6,790.78 | 1895 | 6,494 00 | 1,150 30 | 7,644 30 | West East | 176 184 | Slightly Raised " | " " |
| Rust & Coolidge | 1881 | 19,851 75 | 76,567 55 | 96,419 30 | West East | 360 300 | 1:40 1:40 | " " |
| Central Bridge Co. | 1882 | Nothing | 115,009 49 | 115,009 49 | West East | 498.28 334.52 | 1:38.03 1:41.41 | " " |

TABLE OF VIADUCTS, GIVING LENGTHS, WIDTHS,

| LOCATION. | Character of Superstructure. | Length, ft. | Width, ft. | CHARACTER OF SUBSTRUCTURE. | CONTRACTOR SUBSTRUCTURE. |
|--|------------------------------|---------------------------------|----------------------|--|--|
| Polk Street | Steel | 375.5 | 40 | Same | Unknown |
| West Taylor Street | " | 900 | 58 | Masonry abutments, small piers, steel columns | Jas. Kincaide \$20,777.98 |
| Taylor Street | " | 976.63 | 36 and 40 | Same | Unknown |
| Twelfth and Beech Streets | Iron | 58 | 58 | Masonry abutments | " |
| Twelfth and Beech Streets | " | 140 | 56 | Same | Rebuilt by M. P. Garrity |
| Twelfth Street from bridge west and Lumber Street approach | " | 363.5 365.0 | 58 40 | Masonry piers and abutments Masonry abutment, small piers and columns | Jos. Downey, \$31,504.18 for Twelfth St. 7,750.00 for Lumber St. |
| Twelfth Street west of Clark, first section | " | 495.35 | 58 | Masonry piers and abutments, and small piers and columns | Kinsella, Daly & Co. \$47,372.40 |
| Twelfth Street west of Clark, second section | " | 374 | 58 | Same | Jos. Downey |
| Twelfth St. from Clark Street to Wabash Ave. | Steel | 979.95 | 58 | " | Sackley & Peterson \$34,448.00 |
| Fifth Ave. approach to Twelfth St. viaduct | " | 658.81 | 60 | " | Jos. Downey |
| West Eighteenth Street | Iron | 184 | 36 | Masonry abutments | Jas. Clowry \$15,215.16 |
| Eighteenth Street | Steel | 463.87 | 38 and 58 | Masonry piers and abutments | Jos. Downey |
| Canal and Sixteenth Sts. | Iron | 300 | 64 | Masonry abutments, small piers, and columns | De Golyer & Hubbard \$36,180.00 |
| Halsted and Sixteenth Streets | " | 176.5 | 60 | Same | Unknown |
| Halsted and Sixteenth Streets | " | 176.51 | 60 | " | Old, repaired and rebuilt by City |
| Center Avenue and Sixteenth Street | " | 473.0 | 58 | Masonry piers and abutments | M. P. Garrity \$61,380.00 |
| Blue Island Avenue, Throop Street and Sixteenth Street | " | 122 101 | 65.67 55.67 | Masonry abutments, small piers and columns | Cox Bros. \$60,728.00 |
| Extensions to Blue Island Ave., Halsted St., Center Ave., and Canal St. viaducts by C. G. W. Ry. | Steel | 40-52-36 30.5-35 40 40 | Same as old viaducts | Concrete abutments | C. G. W. Ry. Co. |
| Milwaukee Avenue and Desplaines Street | Iron | 680 472 | 59 65 | Masonry abutments, small piers and columns | \$70,361.40 Jas. Kincaide, 1875 |
| Halsted—Kinzie | " | 473 | 62 | Same | Wm. Hildreth \$23,792.00 |

MAIN APPROACHES, GRADIENTS, ETC.—CONTINUED.

| CONTRACTOR SUPERSTRUCTURE. | Date. | City Paid. | Railroads Paid. | Totals. | APPROACHES. | | | |
|---|--------------|-------------|--------------------|--------------|--|----------------------------|------------------------------|---|
| | | | | | Location. | Length, ft. | Gradient. | Character. |
| Unknown | 1888 | Nothing | All | Unknown | West East Fifth Ave. N. | Bridge Dead end 280 | Level 1:17.5 | Bridge. Dead end. C. W. with P. |
| American Bridge Works \$62,250.00 | 1891 | " | " | \$ 83,027 98 | West East | 305 Bridge | 1:23 Level | " Bridge |
| Binder & Seifert | 1892 | " | " | Unknown | West East Fifth Ave. N. | " Dead end 280 | " 1:17.5 | " Dead end C. W. with P. |
| American Bridge Co. \$4,449.00 | 1873 | \$ 7,549 62 | \$ 25,668 25 | 33,217 87 | West East | 408 378.5 | 1:32 1:30 | " " |
| Rust & Coolidge \$18,440.00 | 1884 | 7,554 20 | 24,306 84 | 31,861 04 | West East | 331 Same | 1:29.68 Same | " " |
| Gottlieb \$48,100 for Twelfth St. 23,900 for Lumber St. | 1887 | ..... | 111,214 18 | 111,214 18 | West East Lumber St. S. | 230 Bridge 150 | 1:40 Level 1:33.33 | " Bridge. C. W. with P. " |
| King Bridge Co. \$70,800.00 | 1886 | 84,522 40 | 44,600 00 | 129,122 40 | West East Clark St. } N } S | Viaduct " 592 490 | Level " 1-40 1-30 | Viaduct. " C. W. with P. " |
| M. Lassig | 1888 | 20,000 00 | Balance | Unknown | West East | Bridge Viaduct | Level " | Bridge. Viaduct. |
| Riter & Conley \$175,208.00 | 1889 | Nothing | 209,736 00 | 209,736 00 | West East | Viaduct 167.7 | Level 1:22.28 | " C. W. with P. |
| Chicago Forge & Bolt Co. | 1888 | " | 60,000 00 | 60,000 00 | South North | Viaduct 200 | Level 1:40 | Viaduct. C. W. with P. |
| Keystone \$11,194.00 | 1879 | 19,842 82 | 14,000 00 | 33,842 82 | West East | 330 130 | 1:28 1:40.5 | " Timber trestle to |
| Keystone | 1888 | Nothing | 114,446 00 | 114,446 00 | West East | Bridge 320 | Level 1:26.4 | Bridge. C. W. with P. |
| Fox & Howard \$37,200.00 | 1873 | 30,000 00 | 96,401 29 | 126,401 29 | North South | 550 530 | 1:42.5 1:39.5 | " " |
| Detroit Bridge Co. | 1869 | Nothing | 24,725 00 | 24,725 00 | North South | 410 265 | 1:31.0 1:21.0 | " " |
| Leighton Bridge Works | 1881 | 17,685 73 | Nothing | 17,685 73 | North South | Same " | Same " | " " |
| Edw. Hemberle \$77,737.33 | 1884 | 105,063 74 | 47,666 38 | 152,730 12 | North South | 722 722 | 1:40 1:40 | " " |
| Keystone \$16,931.00 | 1876 | 74,201 34 | 22,126 80 | 96,328 14 | Southwest Northeast North South | 570 507 423 433.5 | 1:39 1:37 1:31 1:30 | " " " " |
| Gottlieb | 1886 | Nothing | 85,987 57 | 85,987 57 | ..... | ..... | ..... | Same as bef additions, t shorter. |
| American, and Leighton Bridge Works \$70,010.15 | 1876 1880 | 164,165 00 | 131,878 00 | 296,043 00 | Northwest Southeast North South | 670 540 510 435 | 1:50 1:40 1:40 1:40 | C. W. with P. " " " |
| Soulerin, James & Co. \$51,428.00 | 1874 | 65,477 46 | 65,357 81 | 130,835 27 | North South | 524 472 | 1:38.5 1:39 | " " |

TABLE OF VIADUCTS, GIVING LENGTHS, WIDTHS,

| LOCATION. | Character of Superstructure. | Length, ft. | Width, ft. | CHARACTER OF SUBSTRUCTURE. | CONTRACTOR SUBSTRUCTURE. |
|------------------------------------|---------------------------------|----------------|-----------------|---|-----------------------------------|
| Halsted—Kinzie | Steel | 545.26 | 60 | New masonry piers and abutments | Sackley & Peterson \$19,914.63 |
| Sangamon—Kinzie | Iron | 458 | 38 | Masonry piers and abut- ments | M. C. & J. Duffy |
| Ashland—Kinzie | Steel | 376.42 | 58 | Same, with small piers and columns | Wm. F. Hair \$44,439.07 |
| Western—Kinzie | " | 140 | 58 | Masonry abutments | M. C. & J. Duffy \$57,910.89 |
| Ogden Boulevard | " | 440.41 | 120 | Masonry piers and abut- ments | Jas. Kincade \$84,500.00 |
| Halsted and Fortieth Streets | " | 372 | 60 | Same | John Ruddy \$48,271.05 |
| Thirty-fifth and Stewart Avenue | " | 405.53 | 58 | " | Robt. Wilson \$94,679.06 |
| Sixty-first Street | Built by Iron | Town of 804 | Lake be 32.5 | before annexation, no plans or Masonry piers and abut- ments and small piers and columns | records available. |
| Totals | | 19,796.31 | 3,099.8 | | |

MAIN APPROACHES, GRADIENTS, ETC.—CONTINUED.

| CONTRACTOR SUPERSTRUCTURE. | Date. | City Paid. | Railroads Paid. | Totals. | APPROACHES. | | | |
|--|-------|--------------|--------------------|----------------|---|-----------------------------|-----------------------------|--|
| | | | | | Location. | Length. ft. | Gradient. | Character. |
| Milwaukee Bridge & Iron Co. \$54,570.43 | 1893 | Nothing | All | \$ 76,891 25 | North South | Same, slightly raised | Practically the same | Same, slight raised and altered. |
| Cunningham & Keepers \$60,000.00 | 1881 | \$ 50,129 24 | \$ 48,847 79 | 98,977 03 | North South Kinzie St. { W { E | 495 440 | 1:30 1:30 1:17.5 both | C. W. with P. " " |
| Gottlieb \$44,684.00 | 1888 | 29,217 99 | 65,399 36 | 94,317 35 | North South | 542 325 | 1:26.26 1:26.5 | " " |
| Chicago Forge & Bolt Co. \$17,000.00 | 1889 | Nothing | 80,712 88 | 80,712 88 | North South | 603.1 563 | 1:27.65 1:28 | " " |
| American Bridge Works \$118,220.00 | 1892 | 113,645 47 | 89,144 99 | 202,790 46 | Southwest Northeast | 450 450 | 1:25 1:25 | " " |
| C. L. Strobel \$31,834.20 | 1896 | Nothing | 83,594 12 | 83,594 12 | North South | 582.66 567.14 | 1:30.0 1:29.0 | " " |
| Gottlieb \$65,102.00 | 1889 | " | 159,781 06 | 159,781 06 | West East | 637 773 | 1:27.81 1:33.33 | " " |
| | | | | | West East | 100 100 | 1:25 Same | " " |
| | | | | \$3,811,690.16 | | 27,909.16 | A v. 1:34.23 | |

Total length of viaducts built, as far as records show, 19,796.31 feet or 3.75 miles.

" existing viaducts, 18,168.06 feet or 3.44 miles.

" cost of all viaducts, as per records, \$3,811,690.16.

Average cost per viaduct, \$81,099.79.

" gradient, 1:34.23. Total length, main approaches, 27,909.16 feet or 5.28 miles.

Total width of viaducts built, 3,099.8 feet or .58 mile.

" existing viaducts, 2,498.16 feet or .47 mile.

Of the total divisible amounts the Railroads have paid 63 $\frac{1}{10}$ % and the City 36 $\frac{1}{10}$ %. Appx.

If the City has paid the difference between the divisible amounts and the total sum, then the City has paid 39 $\frac{1}{10}$ % and the Railroads 60 $\frac{8}{10}$ %. Appx.

HARBORS OF THE CITY OF CHICAGO.

CONSISTING OF THE CHICAGO RIVER AND BRANCHES AND THE
CALUMET RIVER AND BRANCHES.

RICARD O'S. BURKE, Assistant Engineer, in charge.
CAPTAIN JOHN F. MOORE, Harbor Master.
JOHN C. WECKLER, Vessel Despatcher.

Owing to the contemplated dredging of the Chicago river and its branches by the United States government during the year, but slight provision was made by the Council in the appropriations for 1896 for this purpose, and that made (\$5,000) was rendered inadequate for satisfying the demands of emergency work (work that without prompt action would entail expense and inconvenience on the marine interests) by having two-fifths of it applied to the payment of an old dredging charge.

The dredging done in 1896 is as follows :

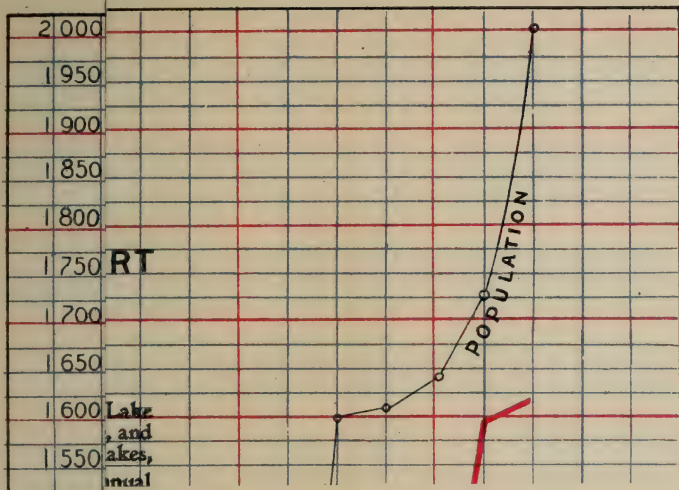
| | | |
|---|-----------------|-------------------|
| In main Chicago river and South branch | 10,710 cu. yds. | |
| In North branch, draws of Halsted street bridge and widening North branch north thereof by property of Grey, Clark & Engel..... | 40,630 cu. yds. | |
| Total dredging by the City | 51,340 cu. yds. | Cost, \$10,332 99 |

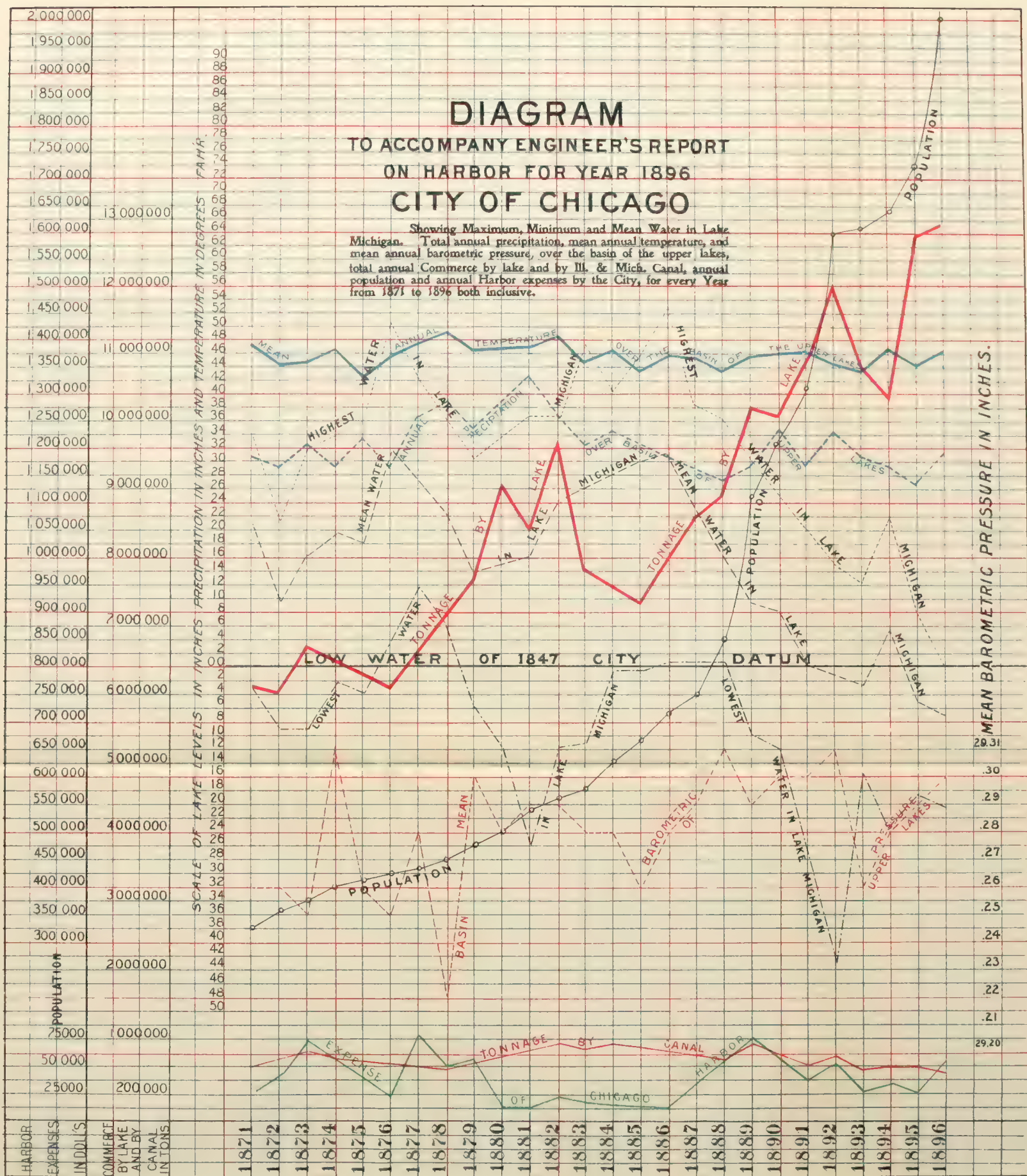
The United States government has done the following under the direction of Major W. L. Marshall, Corps of Engineers, U. S. A.:

| | | |
|--|--------------------|-------------------|
| North branch, Chicago river, on contract | 54,920 cu. yds. | Cost, \$ 5,327 24 |
| South branch and main Chicago river, on contract..... | 78,408.7 cu. yds. | Cost, 8,546 55 |
| Calumet river, mouth and main river | 295,073.4 cu. yds. | Cost, 30,568 82 |
| Total dredging by the U. S. in harbors of City of Chicago on | | |
| contracts continued into 1897..... | 428,402.1 cu. yds. | Cost, \$44,442 61 |

For improvement of their dock fronts, the owners have during the year dredged under permits from the City as follows :

| | |
|-------------------------------------|--|
| Chicago river, 101 permits.... | fees, \$ 809.50, removing 123,200 cu. yds. |
| Calumet river, 17 permits.... | fees, 556.00, removing 102,200 cu. yds. |
| Total dredged by dock owners, fees, | 1,365.50, removing 225,400 cu. yds. |
| Costing about | \$45,080.00. |





The total dredging done by all interests, exclusive of that done under the contracts with the Sanitary District of Chicago, in the harbor of the City is 805,142.1 cubic yards, costing \$99,855.60, or about 14.2 cents per cubic yard.

Of the contracts for dredging continued into year 1897, the following work remains to be done by the United States, viz.:

| | | |
|---|-----------------------------|-------------|
| North branch Chicago river..... | 793,780 cu. yds., at 9.7 c, | \$76,996 66 |
| South branch and main Chicago river.... | 380,021 cu. yds., at 10 c, | 41,422 29 |
| Calumet river..... | 225,596 cu. yds., at 13¼ c, | 29,891 47 |

Total harbors City of Chicago carried over

to year 1897, contracts with U. S.....1,399,397 cu. yds. To cost, \$148,310 42

IMPROVEMENT OF WEST FORK, SOUTH BRANCH,

west from Western avenue bridge, by the blasting and removal of rock and hardpan from that branch, has been continued under the contract with the Fitz Simons & Connell Company, dated September 1, 1893, commenced by order of Council of May 29, 1893, and during the year the following work has been done:

| | |
|---|-------------|
| 2,669 cu. yds. of clay at 29c..... | \$ 774 01 |
| 7,561.2 cu. yds. rock and hardpan at \$3.90 | 29,488 68 |
| | <hr/> |
| | \$30,262 69 |

The further prosecution of this work has been suspended in view of the fact that it is expected to be completed at the expense of the United States.

CONSTRUCTION AND REPAIR OF DOCKS.

The City improved its property at the West Side pumping station by renewing two hundred feet of dock at the head of Canal A, at a cost of \$1,800.00, and private dock owners in the Chicago and Calumet rivers have taken out 59 dock permits from the City at a cost of \$1,463.77 in fees, under which the following improvements were done:

| |
|--|
| 5,577 feet of old dock were repaired. |
| 5,091 feet of old dock were rebuilt, and |
| 250 feet of new dock were constructed, |

making a total dockage of the harbors of the City, on the Calumet and Chicago rivers, of over fifty-one miles. A material part of each river front remains yet to be docked, much of which is expected to be

done during the ensuing year. The dock permits during the year included, in addition to the above repairs, renewal and construction, the construction of one bridge protection, that of the Calumet & Blue Island Railroad company, near Ninety-first street on the Calumet river; the repairs of two bridge protections in the Chicago river and the construction of one coffer-dam in the South branch, south of Van Buren street.

The United States had the south pier at the mouth of the Calumet river extended 400 feet, the superstructure having been completed for 300 feet of that distance.

In addition to the surveys required for giving of lines for work under the dock permits issued during the year, a survey has been made of that part of the North branch from Clybourn place to North avenue, for the purpose of some needed improvements in the North branch by the Chicago, Milwaukee & St. Paul railroad bridge, where the marine interests have been subjected to many inconveniences in the passing of that bridge.

A survey and estimate were made for condemnation of land on the west side of the North branch, south from Diversey avenue (placed at \$11,100) for the needed widening of the North branch.

A survey has been made from Belmont avenue south to the North Western avenue bridge for the establishment of dock lines on the west side of the river, from 100 feet south of Belmont avenue to the harbor line established by dedication of Meyer & Toll, in lot 20 of the Snow estate.

For the estimated cost of condemnation of the lands required for harbor area under the ordinance of March 8, 1895, from Belmont avenue to Lawrence avenue, the amount of \$74,600 has been asked.

The admission of Jefferson and Lake View into the City has added many miles of river and lake frontage of which the City has no surveys except that from Belmont avenue to Lawrence avenue. In order that this information be obtained and filed for the service of our citizens, surveys should be made of that part of the North branch from Lawrence avenue north to the City limits, for which an appropriation of \$2,000 has been asked. The many features of interest and questions involved along the front of the City on the shore of Lake Michigan make accurate information of the shore line, from Evanston to the Indiana boundary, an important matter to the City. In consequence, an appropriation for this survey of \$4,320 has been asked.

The following obstructions to navigation were removed by the City during the year:

| | |
|---|----------|
| The "Clipper City," from North branch, at a cost of..... | \$425.00 |
| The "Tempest," from Slip "D," Lake Front, at a cost of... | 345.00 |
| The "Dewey," from near North avenue, at a cost of..... | 25.00 |

The canal boat "China" was sunk on November 2, 1896, and was removed by the United States government January 9, 1897—the delay arising from the necessity of advertising and perfecting all the essentials of a formal contract, which is the practice under the general government.

ELEVATION OF LAKE MICHIGAN.

The low water period has become more decided during the past year, the elevation of the lake not going higher than datum at the two-mile crib at any time during the year. This period commenced in 1887, when it was only 1.96 feet above datum, as against 2.64 feet above for the prior year; and went lower yearly, until in 1891 it was only one-twentieth of a foot above datum. Since then it gradually, every year (except for 1894), decreased in elevation below datum until its present average is seven inches below the plane of low water of 1847. The greatest monthly range at the two-mile crib was in February, when it was 1.4 feet; the greatest range for the year at the same station was 1.7 feet, being from datum, the highest water during the year, to 1.7 feet below low water of 1847. The average elevation of the North branch at Chicago avenue pipe yards above the average elevation of the lake at the two-mile crib is a trifle less than one-fifth of a foot.

THE FOLLOWING TABLE SHOWS THE ELEVATION OF LAKE MICHIGAN AND OF THE CHICAGO RIVER, AT CHICAGO AVE. PIPE YARDS.

| MONTHS, 1896. | ELEVATION OF WATER (MEANS). | | | | | | | | | | |
|------------------|-----------------------------|-------|-------|--------|----------------|-------|-------|--------|-----------------|-------|------|
| | CHICAGO AVE. PIPE YARD. | | | | TWO-MILE CRIB. | | | | RIVER AND LAKE. | | |
| | Max. | Min. | Mean. | Range. | Max. | Min. | Mean. | Range. | River. | Lake. | Dif. |
| January | -0.10 | -1.20 | -0.76 | 1 10 | -0.40 | -1.70 | -1.00 | 1.30 | -0.76 | -1.00 | 0 24 |
| February | -0.10 | -1.20 | -0.70 | 1.10 | -0.00 | -1.40 | -0.85 | 1.40 | -0.70 | -0.85 | 0.15 |
| March | +0.10 | -1.70 | -0.77 | 1.80 | -0.10 | -1.40 | -0.86 | 1.30 | -0.77 | -0.86 | 0.09 |
| April | -0.10 | -1.00 | -0.64 | 0.90 | -0.20 | -1.40 | -0.80 | 1.20 | -0.64 | -0.80 | 0.16 |
| May | -0.10 | -0.80 | -0.38 | 0.70 | -0.10 | -1.00 | -0.57 | 0.90 | -0.38 | -0.57 | 0.19 |
| June | +0.40 | -0.40 | +0.02 | 0.80 | -0.00 | -0.60 | -0.27 | 0.60 | +0.02 | -0.27 | 0.29 |
| July | +0.40 | -0.30 | +0.04 | 0.70 | -0.00 | -0.60 | -0.30 | 0.60 | +0.04 | -0.30 | 0.34 |
| August | +0.40 | -0.60 | -0.07 | 1.00 | -0.00 | -0.70 | -0.27 | 0.70 | -0.07 | -0.27 | 0.20 |
| September | +0.60 | -0.90 | -0.11 | 1.50 | -0.00 | -1.20 | -0.34 | 1.20 | -0.11 | -0.34 | 0.23 |
| October | +0.60 | -1.00 | -0.25 | 1.60 | -0.00 | -1.20 | -0.43 | 1 20 | 0.25 | -0.43 | 0.18 |
| November | +0.30 | -1.00 | -0.48 | 1.30 | -0.10 | -1.20 | -0.59 | 1.10 | -0.48 | -0.59 | 0.11 |
| December | +0.20 | -1.20 | -0.63 | 1.40 | -0.20 | -1.30 | -0.71 | 1.10 | -0.62 | -0.71 | 0.09 |
| YEAR, 1896..... | +0.40 | -1.70 | -0.39 | 2.30 | 0.00 | -1.70 | -0.58 | 1.70 | -0.39 | -0.58 | 0.19 |

TABLE SHOWING MAXIMUM, MINIMUM AND MEAN WATER IN
LAKE MICHIGAN ANNUALLY, FROM 1854 TO 1896, BOTH
INCLUSIVE, IN FEET.

| Year. | Max. | Min. | Mean. | Year. | Max. | Min. | Mean. |
|-----------|------|-------|-------|-----------|------|-------|-------|
| 1854..... | | | 1.83 | 1876..... | 4.31 | 0.34 | 2.56 |
| 1855..... | 3.45 | 0.15 | 1.56 | 1877..... | 3.56 | 1.04 | 2.31 |
| 1856..... | 3.56 | 0.42 | 1.60 | 1878..... | 3.14 | 0.51 | 2.00 |
| 1857..... | 4.35 | 0.60 | 2.42 | 1879..... | 2.51 | -0.49 | 1.06 |
| 1858..... | 4.69 | 1.33 | 2.00 | 1880..... | 2.81 | -0.99 | 1.16 |
| 1859..... | 4.45 | 1.31 | 2.98 | 1881..... | 3.01 | -2.19 | 1.26 |
| 1860..... | 3.53 | 1.30 | 2.54 | 1882..... | 3.01 | -0.99 | 2.00 |
| 1861..... | 4.40 | 1.20 | 2.56 | 1883..... | 3.81 | -0.99 | 2.10 |
| 1862..... | 3.30 | 0.70 | 2.50 | 1884..... | 3.31 | -0.01 | 2.24 |
| 1863..... | 3.30 | -0.80 | 2.10 | 1885..... | 3.71 | -0.01 | 2.48 |
| 1864..... | 2.80 | -0.40 | 1.57 | 1886..... | 4.41 | 0.01 | 2.64 |
| 1865..... | 3.66 | -1.08 | 1.30 | 1887..... | 3.11 | 0.01 | 1.96 |
| 1866..... | 2.50 | 0.00 | 1.07 | 1888..... | 3.01 | 0.01 | 1.30 |
| 1867..... | 2.60 | -0.41 | 1.49 | 1889..... | 2.51 | -0.79 | 0.77 |
| 1868..... | 2.58 | -1.00 | 1.01 | 1890..... | 2.21 | -0.99 | 0.63 |
| 1869..... | 2.13 | 0.41 | 1.13 | 1891..... | 1.61 | -2.39 | 0.05 |
| 1870..... | 3.25 | -0.30 | 2.09 | 1892..... | 1.30 | -3.60 | -0.17 |
| 1871..... | 2.80 | -0.40 | 1.77 | 1893..... | 1.00 | -1.30 | -0.20 |
| 1872..... | 1.80 | -0.74 | 0.81 | 1894..... | 1.80 | -1.80 | 0.50 |
| 1873..... | 2.73 | -0.76 | 1.40 | 1895..... | 0.63 | -1.24 | -0.49 |
| 1874..... | 2.80 | -0.20 | 1.67 | 1896..... | 0.00 | -1.70 | -0.58 |
| 1875..... | 3.01 | -0.34 | 1.45 | | | | |

Table showing Precipitation and Mean Temperature and Mean Barometric Pressure in inches, and degrees Fahr., over the basin of upper lakes, and Mean Water in Lake Michigan, in inches, by years, from 1871 to 1896, both inclusive, with the annual increase or decrease.

| YEAR | BASIN OF UPPER LAKES. | | | | | | | | | LAKE MICHIGAN. | | |
|------|-----------------------|---------------------------------|-------|------------|---------------------------------|-------|-----------|---------------------------------|-------|-----------------------|---------------------------------|-------|
| | Precipitation. | Difference with Preceding Year. | | Mean Temp. | Difference with Preceding Year. | | Pressure. | Difference with Preceding Year. | | Levels of Mean Water. | Difference with Preceding Year. | |
| | Inches. | Inc. | Dec. | Deg's. | Inc. | Dec. | Inches. | Inc. | Dec. | Inches. | Inc. | Dec. |
| 1871 | 30.75 | ..... | ..... | 47.2 | ..... | ..... | 29.26 | ..... | ..... | 21.24 | ..... | ..... |
| 1872 | 29.59 | ..... | 1.16 | 44.2 | ..... | 3.0 | 29.26 | 0.00 | 0.00 | 9.62 | ..... | 11.62 |
| 1873 | 32.49 | 2.90 | ..... | 44.3 | 0.1 | ..... | 29.25 | ..... | .01 | 16.80 | 7.18 | ..... |
| 1874 | 29.56 | ..... | 2.93 | 46.3 | 2.0 | ..... | 29.31 | .06 | ..... | 20.04 | 3.24 | ..... |
| 1875 | 33.06 | 3.50 | ..... | 42.0 | ..... | 4.3 | 29.26 | ..... | .05 | 17.40 | ..... | 2.64 |
| 1876 | 28.93 | ..... | 4.13 | 45.1 | 3.1 | ..... | 29.25 | ..... | .01 | 30.72 | 13.32 | ..... |
| 1877 | 36.23 | 7.30 | ..... | 47.5 | 2.4 | ..... | 29.28 | .03 | ..... | 27.72 | ..... | 3.00 |
| 1878 | 38.35 | 2.12 | ..... | 49.2 | 1.7 | ..... | 29.22 | ..... | .06 | 24.00 | ..... | 3.72 |
| 1879 | 35.51 | ..... | 2.84 | 46.5 | ..... | 2.7 | 29.30 | .08 | ..... | 12.72 | ..... | 11.28 |
| 1880 | 38.36 | 2.85 | ..... | 47.0 | 0.5 | ..... | 29.28 | ..... | .02 | 13.92 | 1.20 | ..... |
| 1881 | 42.42 | 4.06 | ..... | 47.1 | 0.1 | ..... | 29.29 | .01 | ..... | 15.12 | 1.20 | ..... |
| 1882 | 37.28 | ..... | 5.14 | 48.2 | 1.1 | ..... | 29.29 | .00 | .00 | 24.00 | 8.88 | ..... |
| 1883 | 32.66 | ..... | 4.62 | 44.4 | ..... | 3.8 | 29.28 | ..... | .01 | 25.20 | 1.20 | ..... |
| 1884 | 34.31 | 1.65 | ..... | 46.2 | 1.8 | ..... | 29.28 | .00 | .00 | 28.88 | 1.68 | ..... |
| 1885 | 32.99 | ..... | 1.32 | 43.8 | ..... | 2.4 | 29.26 | ..... | .02 | 28.56 | 1.68 | ..... |
| 1886 | 30.56 | ..... | 2.43 | 45.8 | 2.0 | ..... | 29.28 | .02 | ..... | 31.68 | 3.12 | ..... |
| 1887 | 29.63 | ..... | 0.93 | 45.5 | ..... | 0.3 | 29.29 | .01 | ..... | 23.52 | ..... | 8.16 |
| 1888 | 27.57 | ..... | 2.06 | 43.8 | ..... | 1.7 | 29.31 | .02 | ..... | 15.60 | ..... | 7.92 |
| 1889 | 28.65 | 1.08 | ..... | 45.9 | 2.1 | ..... | 29.29 | ..... | .02 | 9.24 | ..... | 6.36 |
| 1890 | 34.58 | 5.93 | ..... | 46.0 | 0.1 | ..... | 29.30 | .01 | ..... | 7.56 | ..... | 1.68 |
| 1891 | 29.62 | ..... | 4.96 | 46.4 | 0.4 | ..... | 29.30 | .00 | .00 | 0.60 | ..... | 6.96 |
| 1892 | 34.15 | 4.53 | ..... | 44.7 | ..... | 1.7 | 29.31 | .01 | ..... | -2.04 | ..... | 2.64 |
| 1893 | 31.46 | ..... | 2.69 | 43.8 | ..... | 0.9 | 29.26 | ..... | .05 | -2.35 | ..... | 0.31 |
| 1894 | 29.51 | ..... | 1.95 | 46.9 | 3.1 | ..... | 29.28 | .02 | ..... | 6.00 | 8.35 | ..... |
| 1895 | 26.03 | ..... | 3.48 | 44.9 | ..... | 2.0 | 29.29 | .01 | ..... | -5.88 | 0.00 | 11.88 |
| 1896 | 31.59 | 5.56 | ..... | 46.1 | 1.2 | ..... | 29.30 | .01 | ..... | -6.96 | 0.00 | 1.08 |

BY LAKE PERIODS.

| YEAR | BASIN OF UPPER LAKES. | | | | | | | | | LAKE MICHIGAN. | | | ANNUAL. |
|--------------------|-----------------------|--------------------------------|------|------------|--------------------------------|------|------------|--------------------------------|------|-----------------------|---------------------------------|-------|-----------------|
| | Precipitation. | Difference with Preced'g Year. | | Mean Temp. | Difference with Preced'g Year. | | Press-ure. | Difference with Preced'g Year. | | Levels of Mean Water. | Difference with Preceding Year. | | |
| | Inches. | Inc. | Dec. | Deg's. | Inc. | Dec. | Inches. | Inc. | Dec. | Inches | Inc. | Dec. | |
| 1871 to 1896 | 32.72 | .... | .... | 45.8 | .... | .... | 29.26 | .... | .... | 20.03 | .... | .... | Means 1871-1879 |
| | 35.71 | 2.99 | .... | 46.1 | 0.3 | .... | 29.28 | .02 | .... | 23.91 | 3.88 | .... | " 1880-1886 |
| | 30.81 | .... | 4.90 | 46.6 | 0.5 | .... | 29.29 | .01 | .... | 7.45 | .... | 16.46 | " 1887-1893 |
| | 29.04 | .... | 1.77 | 46.0 | .... | 0.6 | 29.29 | .00 | .00 | 2.28 | .... | 9.73 | " 1894-1896 |
| | 32.53 | .... | .... | 45.7 | .... | .... | 29.28 | .... | .... | 15.11 | .... | .... | " 26 years. |

COMMERCE BY LAKE.

Notwithstanding the low water in Lake Michigan and the Chicago river, the trade of the City by lake increased 334,632 tons over that for the year 1895, while the number of vessels carrying this trade is 1233 less than the number similarly engaged in that year—both facts establishing the truth of the constantly increasing carrying capacity of the vessels entering our ports.

COMMERCE BY LAKE.—TONNAGE OF THE DISTRICT OF CHICAGO, 1896.

ENTRANCES.

| PORTS. | COASTING TRADE. | | | | | | FOREIGN TRADE. | | | | | | TOTALS. | | | |
|--------------------|-----------------|-----------|--|--------|-----------|--|----------------|--------|--|--------|--------|--|---------|--------|--------|-----------|
| | STEAM. | | | SAIL. | | | STEAM. | | | SAIL. | | | | | TOTAL. | |
| | TOTAL. | | | TOTAL. | | | TOTAL. | | | TOTAL. | | | | | TOTAL. | |
| | No. | Tons. | | No. | Tons. | | No. | Tons. | | No. | Tons. | | No. | Tons. | No. | Tons. |
| Chicago..... | 5,206 | 4,152,739 | | 1,810 | 603,578 | | 13 | 11,965 | | 65 | 18,978 | | 78 | 30,943 | 7,154 | 4,787,250 |
| South Chicago..... | 805 | 1,185,150 | | 475 | 449,965 | | 5 | 3,498 | | 8 | 2,561 | | 13 | 6,059 | 1,293 | 1,641,174 |
| Michigan City..... | 157 | 41,746 | | 59 | 10,982 |  | ..... | ..... |  | ..... | ..... |  | ..... | ..... | 216 | 52,728 |
| Total..... | 6,228 | 5,379,625 | | 2,344 | 1,064,525 | | 18 | 15,463 | | 73 | 21,539 | | 91 | 37,002 | 8,663 | 6,481,152 |

CLEARANCES.

| PORTS. | COASTING TRADE. | | | | | | FOREIGN TRADE. | | | | | | TOTALS. | | | | | | | | |
|---------------------|-----------------|-----------|--|-------|-----------|--|----------------|-----------|--|--------|---------|--|---------|--------|-------|-------|---------|--------|-------|-----------|--|
| | STEAM. | | | SAIL. | | | TOTAL. | | | STEAM. | | | | | SAIL. | | | TOTAL. | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| | No. | Tons. | | No. | Tons. | | No. | Tons. | | No. | Tons. | | No. | Tons. | | No. | Tons. | | No. | Tons. | |
| Chicago | 5,148 | 4,010,923 | | 1,739 | 575,099 | | 6,887 | 4,586,022 | | 93 | 83,375 | | 122 | 50,125 | | 215 | 133,500 | | 7,102 | 4,719,522 | |
| South Chicago | 878 | 1,295,583 | | 488 | 461,998 | | 1,366 | 1,757,581 | | 50 | 42,021 | | 34 | 18,264 | | 34 | 18,264 | | 1,450 | 1,817,866 | |
| Michigan City | 157 | 41,572 | | 64 | 12,243 | | 221 | 53,815 |  | ..... | ..... |  | ..... | ..... |  | ..... | ..... |  | 221 | 53,815 | |
| Total | 6,183 | 5,348,078 | | 2,291 | 1,049,340 | | 8,474 | 6,397,418 | | 143 | 125,396 | | 156 | 68,389 | | 299 | 193,783 | | 8,773 | 6,591,203 | |

CITY OF CHICAGO—SUMMARY OF COMMERCE BY LAKE.

| WHERE. | ENTRANCES. | | CLEARANCES. | | TOTALS. | |
|----------------------|------------|-----------|-------------|-----------|----------|------------|
| | VESSELS. | TONNAGE. | VESSELS. | TONNAGE. | VESSELS. | TONNAGE. |
| Chicago river..... | 7,154 | 4,787,250 | 7,102 | 4,719,522 | 14,256 | 9,506,772 |
| Calumet river..... | 1,293 | 1,641,174 | 1,450 | 1,817,866 | 2,743 | 3,459,040 |
| AVERAGE CARGO: | | | | | | |
| | Tons. | | | | | |
| Chicago river..... | 667 | | | | | |
| Calumet river..... | 1,261 | | | | | |
| City | 763 | | | | | |
| City of Chicago..... | 8,447 | 6,428,424 | 8,552 | 6,537,388 | 16,999 | 12,965,812 |

Of the fifty-four leading items of our trade by the lake, the following principal ones are selected:

SHIPPED FROM CHICAGO.

| | | |
|--|----------------------|--------------------|
| Flour, barrels..... | 1,736,935 as against | 1,148,489 in 1895. |
| Grain, bushels | 110,952,258 “ “ | 80,420,296 “ 1895. |
| Packages of miscellaneous merchandise, | 2,415,236 “ “ | 1,967,209 “ 1895. |

RECEIVED AT CHICAGO.

| | | |
|---|----------------------|-----------------------|
| Coal, tons | 1,360,300 as against | 1,268,564 in 1895. |
| Lumber, Laths and Shingles, feet of. . | 940,116,000 “ “ | 1,277,527,000 “ 1895. |
| Grain, bushels..... | 127,821 “ “ | 1,507,610 “ 1895. |
| Packages of miscellaneous merchandise | 13,230,269 “ “ | 9,702,381 “ 1895. |

COMPARATIVE STATEMENT

of entrances and clearances for the fiscal year ending June 30, 1896, from the Supervising Agent of the Treasury Department:

| | | | |
|---|------------------|--------------------|---------------|
| Baltimore, Md..... | entrances, 1,810 | clearances, 2,683 | total, 4,493 |
| Boston, Mass..... | “ 3,019 | “ 3,243 | “ 6,262 |
| New Orleans, La..... | “ 1,212 | “ 1,189 | “ 2,401 |
| Philadelphia, Pa..... | “ 1,846 | “ 2,064 | “ 3,910 |
| San Francisco, Cal..... | “ 1,105 | “ 1,395 | “ 2,500 |
| Totals..... | entrances, 8,992 | clearances, 10,574 | total, 19,566 |
| New York, N. Y..... | entrances, 7,174 | clearances, 6,788 | total, 13,962 |
| Chicago, Ill..... | “ 9,263 | “ 9,424 | “ 18,687 |
| Chicago less than the total for Baltimore, Boston, New Orleans, Philadelphia and San Francisco..... | | | 879 |
| Chicago more than New York..... | | | 4,725 |

The tonnage of the principal American and European ports, year 1894, from report of Chief of the Bureau of Statistics, Treasury Department, Washington, D. C.:

| | Tons. | | Tons. |
|------------------|------------|---------------------|------------|
| London | 14,433,580 | Antwerp..... | 10,083,228 |
| Chicago..... | 10,284,172 | Hamburg | 12,447,706 |
| Liverpool | 10,489,578 | Bremen..... | 4,325,487 |
| Cardiff | 10,478,394 | New York | 15,333,398 |
| Hull | 3,933,123 | Boston..... | 3,403,682 |
| Tyne Ports | 8,655,115 | Philadelphia | 3,173,031 |
| Glasgow .. | 2,760,274 | Baltimore | 2,727,486 |
| Havre..... | 4,562,692 | New Orleans | 2,230,692 |
| Bordeaux | 2,168,472 | San Francisco..... | 3,528,291 |
| Dunkirk..... | 2,381,588 | Puget Sound | 3,654,929 |
| Marseilles..... | 7,374,591 | Chicago, 1896 | 12,965,812 |

COMMERCE BY LAKE AND CANAL—CITY OF CHICAGO,

from 1848 to 1896, by years, with population 1831 to 1896. Compiled from official records of the Department.

| Year. | VESSELS BY LAKE. | | | BY ILL. & MICH. CANAL. | | | POPULATION. | REMARKS. | |
|-------|------------------|----------------|---------------------|------------------------|-----------|----------------|-------------|-------------------------|--------|
| | Total No. | Total Tonnage. | Average Cargo, Ton. | Boats, No. | Tonnage. | Tolls Dollars. | | | |
| 1848 | ..... | ..... | ..... | ..... | ..... | 87,890 | 20,023 | | |
| 1849 | ..... | ..... | ..... | ..... | ..... | 118,375 | 23,047 | | |
| 1850 | ..... | ..... | ..... | ..... | ..... | 125,504 | 28,269 | | |
| 1851 | ..... | ..... | ..... | ..... | ..... | 173,300 | 34,000 | | |
| 1852 | ..... | ..... | ..... | ..... | ..... | 168,577 | 38,734 | | |
| 1853 | ..... | ..... | ..... | ..... | ..... | 173,372 | 60,662 | | |
| 1854 | ..... | ..... | ..... | ..... | ..... | 198,326 | 65,872 | | |
| 1855 | ..... | ..... | ..... | ..... | ..... | 180,519 | 80,023 | | |
| 1856 | ..... | ..... | ..... | ..... | ..... | 184,310 | 86,000 | | |
| 1857 | ..... | ..... | ..... | ..... | ..... | 197,830 | 93,000 | | |
| 1858 | ..... | ..... | ..... | ..... | ..... | 197,171 | 84,000 | | |
| 1859 | ..... | ..... | ..... | ..... | ..... | 132,147 | 94,000 | | |
| 1860 | ..... | ..... | ..... | 201 | 367,437 | 138,554 | 109,460 | | |
| 1861 | ..... | ..... | ..... | 194 | 547,295 | 218,040 | 120,000 | | |
| 1862 | 14,687 | 3,847,246 | 262 | 211 | 673,590 | 264,647 | 137,030 | Population Prior Years. | |
| 1863 | 17,135 | 4,333,832 | 252 | 240 | 619,599 | 210,386 | 150,000 | | |
| 1864 | 17,762 | 4,339,770 | 244 | 228 | 510,286 | 156,607 | 161,288 | | |
| 1865 | 20,179 | 4,199,135 | 208 | 228 | 616,140 | 300,810 | 178,492 | | |
| 1866 | 22,199 | 4,620,092 | 208 | 230 | 746,815 | 202,958 | 200,418 | 1831 | 60 |
| 1867 | 24,370 | 5,101,203 | 209 | 209 | 746,954 | 252,231 | 225,000 | 1832 | 600 |
| 1868 | 26,399 | 6,005,403 | 265 | 218 | 737,827 | 215,720 | 252,054 | 1833 | 350 |
| 1869 | 27,602 | 6,273,346 | 227 | 219 | 817,738 | 238,759 | 280,000 | 1834 | 1,900 |
| 1870 | 25,172 | 6,033,207 | 239 | 179 | 585,970 | 149,635 | 298,700 | 1835 | 3,265 |
| 1871 | 24,632 | 6,178,336 | 251 | 186 | 628,975 | 159,050 | 334,270 | 1836 | 4,000 |
| 1872 | 25,353 | 6,077,542 | 239 | 173 | 783,641 | 165,874 | 367,396 | 1837 | 4,179 |
| 1873 | 23,734 | 6,564,542 | 239 | 172 | 849,533 | 166,641 | 380,000 | 1838 | 4,000 |
| 1874 | 21,547 | 6,329,711 | 294 | 152 | 712,020 | 144,831 | 395,400 | 1839 | 4,200 |
| 1875 | 21,095 | 6,279,055 | 298 | 142 | 676,025 | 107,081 | 407,000 | 1840 | 4,470 |
| 1876 | 19,245 | 6,167,736 | 320 | 146 | 691,946 | 113,293 | 420,000 | 1841 | 5,500 |
| 1877 | 20,517 | 6,585,415 | 321 | 145 | 605,912 | 96,913 | 439,776 | 1842 | 6,590 |
| 1878 | 20,984 | 7,239,673 | 345 | 140 | 598,792 | 84,330 | 450,000 | 1843 | 7,580 |
| 1879 | 23,873 | 7,757,395 | 325 | 136 | 669,559 | 89,064 | 475,000 | 1844 | 8,000 |
| 1880 | 25,520 | 9,154,351 | 345 | 133 | 751,360 | 92,296 | 503,298 | 1845 | 12,088 |
| 1881 | 26,005 | 8,762,247 | 337 | 133 | 826,133 | 85,130 | 540,000 | 1846 | 14,169 |
| 1882 | 26,977 | 9,754,949 | 362 | 132 | 1,011,287 | 85,947 | 560,693 | 1847 | 16,859 |
| 1883 | 23,982 | 7,790,337 | 325 | 132 | 925,575 | 77,975 | 580,000 | | |
| 1884 | 22,826 | 7,508,696 | 330 | 134 | 956,721 | 77,102 | 630,000 | | |
| 1885 | 21,542 | 7,306,222 | 339 | 135 | 827,355 | 66,800 | 664,634 | | |
| 1886 | 22,372 | 7,877,080 | 352 | 130 | 808,019 | 62,516 | 704,000 | | |
| 1887 | 23,972 | 8,749,852 | 365 | 132 | 742,074 | 53,024 | 760,000 | | |
| 1888 | 22,095 | 8,890,658 | 402 | 127 | 751,055 | 56,028 | 830,000 | | |
| 1889 | 21,788 | 10,267,831 | 471 | 114 | 917,047 | 60,605 | 1,100,000 | | |
| 1890 | 20,133 | 10,116,051 | 502 | 104 | 742,392 | 65,112 | 1,200,000 | | |
| 1891 | 19,680 | 10,862,898 | 522 | 97 | 641,156 | 49,557 | 1,320,000 | | |
| 1892 | 21,123 | 11,780,393 | 565 | 95 | 783,288 | 54,937 | 1,450,000 | | |
| 1893 | 17,044 | 10,788,029 | 692 | 82 | 529,816 | 38,702 | 1,600,000 | | |
| 1894 | 16,202 | 10,284,178 | 635 | 85 | 617,811 | 44,928 | 1,640,000 | | |
| 1895 | 18,232 | 12,631,180 | 693 | 83 | 591,407 | 39,106 | 1,725,000 | | |
| 1896 | 16,999 | 12,965,812 | 763 | 67 | 446,762 | 34,543 | 2,000,000 | | |

TABLE SHOWING MOVEMENTS OF COMMERCE BY LAKE, IN PERIODS FROM 1862 TO 1896, BOTH INCLUSIVE.

| PERIOD. | YEARLY AVERAGE TONNAGE. | | | YEARLY AVERAGE No. VESSELS. | | | YEARLY AVERAGE CARGO. | | |
|--------------|-------------------------|-----------------------|-----------|-----------------------------|-----------------------|-----------|-----------------------|-----------------------|-----------|
| | Tons. | Increase or Decrease. | | No. | Increase or Decrease. | | Tons. | Increase or Decrease. | |
| | | Tons. | Per cent. | | No. | Per cent. | | Tons. | Per cent. |
| 1862 to 1870 | 4,972,582 | ..... | ..... | 21,723 | ..... | ..... | 229 | ..... | ..... |
| 1871 to 1880 | 6,833,376 | +1,860,794 | 37.4 | 22,650 | + 927 | + 4.3 | 302 | + 73 | 32.0 |
| 1881 to 1890 | 8,702,693 | +1,869,317 | 27.4 | 23,169 | + 519 | + 2.3 | 376 | + 74 | 24.5 |
| 1891 to 1896 | 11,552,082 | +2,849,389 | 32.7 | 18,231 | -4,956 | -21.4 | 634 | +258 | 68.6 |

A study of the foregoing table is instructive. We see that our trade by the lake for the ten years ending 1880 averaged annually $37\frac{4}{10}$ per cent. more than the annual average from 1862 to 1870, but for the next ten years, 1881 to 1890, the annual average falls to only $27\frac{4}{10}$ per cent. of an increase over that for 1871 to 1880; yet a better condition is reached in the annual average of the last six years, which is $32\frac{7}{10}$ per cent. greater than that for the period 1881 to 1890. The increase in the average cargo and the marked decrease in the average number of vessels are suggestive. The average cargo for the last six years is $68\frac{6}{10}$ per cent. greater than that for the ten years ending in 1890, and the decade 1881-1890 was itself $24\frac{5}{10}$ per cent. greater than the average cargo for the ten years 1871 to 1880, which surpassed the average cargo for the period 1862 to 1870 by 32 per cent. The average number of vessels gradually decreased to the period ending 1890, when it was $21\frac{3}{10}$ per cent. over the average number for period 1871 to 1880; but in the last six years the average number fell 4,956 vessels per year, or $21\frac{4}{10}$ per cent. less than the average number for the ten years 1881 to 1890.

The greatest number of vessels that entered the port of Chicago in any one year was in 1869, when it was 27,602, carrying 6,273,346 tons; and the least number was in 1862, when it was 14,687, carrying 3,847,246 tons.

The steady, well defined increase in the carrying capacity of the vessels now entering our ports, and the decided decrease in the number of vessels while our lake trade increases every year, make an imperative demand for greater depth in both the Chicago and Calumet rivers; especially is this true in the case of the former.

VESSEL MOVEMENT IN CHICAGO RIVER.

The following tables of the movement of vessels inside the Chicago river have been compiled from the records of the Vessel Dispatcher's office, but these records do not show the vessel movements in the Calumet river. Movement of vessels and operation of bridges from April to December, 1896, day and night—from records of the Vessel Dispatcher.

| BRIDGES. | NUMBER. | | | | AVERAGE. | | | | | PERCENTAGE OF TIME. | |
|----------------|------------------|----------------------------|-----------------|-------------------|-------------------------|------------------------|--------------------------|--------------------------|--------------------|---------------------|--------------|
| | Days in Service. | Hours Open. | Vessels Passed. | Swings of Bridge. | No. of Vessels per Day. | No. of Swings per Day. | Time Open per Swing. | Time Open per Hour. | Time Open per Day. | Bridge Closed. | Bridge Open. |
| Rush street.. | 229 | ^{h. m.} 376.41 | 10,237 | 8,565 | 44.70 | 37.40 | ^{m. s.} 2.64 | ^{m. s.} 4.11 | 98.69 | 93.15 | .0685 |
| State street.. | 229 | 306.33 | 9,607 | 7,858 | 41.95 | 34.31 | 2.34 | 3.35 | 80.32 | 94.43 | .0557 |
| Dearborn st.. | 229 | 295.14 | 9,171 | 7,496 | 40.05 | 32.73 | 2.36 | 3.22 | 77.35 | 94.63 | .0537 |
| Wells street.. | 229 | 281.25 | 8,208 | 6,756 | 35.84 | 29.50 | 2.50 | 3.07 | 73.73 | 94.88 | .0512 |
| Lake street.. | 229 | 294.49 | 6,137 | 5,121 | 26.81 | 22.36 | 3.45 | 3.22 | 77.24 | 94.64 | .0536 |
| Jackson street | 229 | 249.21 | 6,205 | 5,240 | 27.10 | 22.88 | 2.86 | 3.72 | 65.33 | 95.47 | .0453 |
| Harrison st.. | 229 | 318.37 | 6,110 | 4,963 | 26.68 | 21.67 | 3.85 | 3.48 | 83.48 | 94.21 | .0579 |
| 12th street.. | 229 | 280.15 | 6,054 | 5,012 | 26.44 | 21.89 | 3.35 | 3.06 | 73.43 | 94.91 | .0509 |
| 18th street.. | 229 | 218.01 | 5,048 | 4,419 | 22.04 | 19.30 | 2.96 | 2.38 | 57.12 | 96.03 | .0397 |
| 22nd street.. | 229 | 247.48 | 4,875 | 4,143 | 21.29 | 18.09 | 3.59 | 2.75 | 64.93 | 95.49 | .0451 |
| Kinzie street. | 229 | 294.21 | 6,095 | 4,358 | 26.62 | 19.03 | 4.05 | 3.21 | 77.12 | 94.64 | .0536 |

DETAILS OF VESSEL MOVEMENTS—PASSING BRIDGES, BY MONTHS, YEAR 1896.

| MONTHS, 1896. | Rush St. | | | State St. | | | Dearborn St. | | | Wells St. | | | Lake St. | | | Jackson St. | | | Harrison St. | | | 12th St. | | | 18th St. | | | 22nd St. | | | Kinzie St. | | |
|------------------|--------------|-------------|---------------|--------------|-------------|---------------|--------------|-------------|---------------|--------------|-------------|---------------|--------------|-------------|---------------|--------------|-------------|---------------|--------------|-------------|---------------|--------------|-------------|---------------|--------------|-------------|---------------|--------------|-------------|---------------|--------------|-------------|---------------|
| | No. Vessels. | No. Swings. | Minutes Open. | No. Vessels. | No. Swings. | Minutes Open. | No. Vessels. | No. Swings. | Minutes Open. | No. Vessels. | No. Swings. | Minutes Open. | No. Vessels. | No. Swings. | Minutes Open. | No. Vessels. | No. Swings. | Minutes Open. | No. Vessels. | No. Swings. | Minutes Open. | No. Vessels. | No. Swings. | Minutes Open. | No. Vessels. | No. Swings. | Minutes Open. | No. Vessels. | No. Swings. | Minutes Open. | No. Vessels. | No. Swings. | Minutes Open. |
| May | 1267 | 1017 | 2764 | 1165 | 899 | 2463 | 1147 | 913 | 2163 | 1087 | 872 | 2264 | 818 | 658 | 2331 | 811 | 644 | 1857 | 783 | 634 | 2435 | 779 | 688 | 1864 | 661 | 551 | 1669 | 638 | 527 | 1780 | 754 | 477 | 2221 |
| June | 1523 | 1248 | 3548 | 1430 | 1132 | 2799 | 1348 | 1070 | 2487 | 1206 | 940 | 2120 | 906 | 728 | 2428 | 915 | 735 | 2147 | 889 | 679 | 2536 | 915 | 703 | 1892 | 750 | 653 | 1978 | 737 | 601 | 2398 | 873 | 614 | 2526 |
| July | 1767 | 1510 | 4208 | 1731 | 1302 | 3023 | 1602 | 1271 | 2947 | 1401 | 1118 | 2894 | 986 | 814 | 2779 | 988 | 801 | 1559 | 1014 | 825 | 2728 | 980 | 814 | 2184 | 850 | 769 | 2205 | 828 | 699 | 2410 | 978 | 727 | 2832 |
| August | 1644 | 1394 | 3928 | 1550 | 1295 | 2650 | 1430 | 1166 | 2684 | 1334 | 1073 | 2645 | 887 | 723 | 2506 | 880 | 745 | 2547 | 856 | 685 | 2515 | 843 | 707 | 2059 | 775 | 658 | 1966 | 694 | 590 | 2162 | 840 | 591 | 2416 |
| September. | 1304 | 1114 | 2712 | 1123 | 969 | 2197 | 1036 | 897 | 2212 | 880 | 738 | 2151 | 754 | 657 | 2123 | 758 | 684 | 1922 | 761 | 635 | 2453 | 740 | 619 | 2366 | 644 | 575 | 1841 | 616 | 530 | 1895 | 801 | 589 | 2278 |
| October ... | 1239 | 1063 | 2534 | 1239 | 1063 | 2534 | 1239 | 1063 | 2534 | 1083 | 913 | 2270 | 860 | 723 | 2404 | 898 | 768 | 2087 | 847 | 700 | 2951 | 847 | 700 | 2951 | 653 | 560 | 1618 | 671 | 569 | 2413 | 828 | 623 | 2490 |
| November. | 1133 | 867 | 2143 | 1083 | 932 | 2151 | 1083 | 932 | 2115 | 981 | 836 | 1965 | 720 | 628 | 2328 | 751 | 670 | 2030 | 752 | 621 | 2749 | 752 | 621 | 2749 | 569 | 515 | 1383 | 545 | 489 | 1369 | 745 | 532 | 2070 |
| December. | 360 | 325 | 744 | 286 | 266 | 576 | 286 | 266 | 576 | 286 | 266 | 576 | 206 | 190 | 790 | 204 | 191 | 812 | 198 | 182 | 750 | 198 | 182 | 750 | 146 | 138 | 421 | 146 | 138 | 421 | 276 | 202 | 818 |

An examination of the preceding tables of the movement of vessels shows that of the whole number engaged in our trade by the lake 16.14 per cent used the Calumet river, and the balance or 83.86 per cent. used the Chicago river. Of this latter number, 28.2 per cent. stopped east of Rush street bridge, 71.8 per cent. going west of it; 14.2 per cent. of the whole number using the Chicago river stopped between Wells and Rush street bridges, 57.6 per cent. of our whole Chicago river vessel movement going west of Lake street bridge.

Twenty-eight and nine-tenths per cent. of our Chicago river vessels passed down the South branch, while 28.7 per cent. of them passed up the North branch. In addition to this, there was a movement from branch to branch of Chicago river, for of the vessels passing west of Wells street bridge 2,012 passed Kinzie and Lake street bridges, exchanging their positions from one branch to the other of the Chicago river, keeping west of Wells street while so doing.

Of the whole number of vessels that went down the South branch, 79.4 per cent. passed beyond Twenty-second street bridge; the balance or 20.6 per cent. of the vessels that entered the South branch remained north of Twenty-second street bridge.

No record has been kept during the year of the vessel movement in the North branch north of Kinzie street bridge, but during the year 1895, 73.58 per cent. of the whole North branch trade went up the North branch and the Ogden canal beyond Chicago avenue bridge.

The following tables of temperature and precipitation for Chicago, from 1830 and 1843 to 1896 respectively, have been compiled from the official records of the United States Signal Service and the United States Weather Bureau :

TEMPERATURE BY MONTHS, SEASONS AND YEARS, FROM 1830 TO
1896, INCLUSIVE—AT CHICAGO, ILL.

| Year. | MONTHLY MEANS. | | | | | | | | | | | | MEANS. SEASONS AND YEARS | | | | | Year. |
|-------|----------------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------------------------|---------|---------|---------|---------|-------|
| | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Spring. | Summer. | Autumn. | Winter. | Annual. | |
| 1830 | 23 | 30 | 37 | 53 | 59 | 64 | 75 | 72 | 58 | 57 | 45 | 26 | 49.7 | 70.3 | 53.3 | ..... | 50 | 1830 |
| 1831 | 18 | 20 | 37 | 43 | 57 | 69 | 72 | 70 | 61 | 49 | 32 | 15 | 45.7 | 70.3 | 47.3 | 21.3 | 45 | 1831 |
| 1832 | 24 | 15 | 37 | 49 | 55 | 68 | 70.6 | 71.4 | 62.9 | 54 | 39.9 | 33.2 | 47 | 70 | 52.3 | 18 | 48 | 1832 |
| 1833 | 29.7 | 27.6 | 33.3 | 50.5 | 60.1 | 63.6 | 72.4 | 70.3 | 64 | 45.5 | 39.8 | 34.1 | 48 | 68.8 | 49.8 | 30.2 | 49.2 | 1833 |
| 1834 | 13.3 | 34.9 | 36.6 | 47.4 | 54.6 | 62.9 | 74.3 | 71.2 | 60.1 | 40.3 | 40.3 | 29.6 | 46.2 | 69.5 | 48.9 | 27.4 | 47.6 | 1834 |
| 1835 | 28.1 | 14 | 32 | 42.5 | 54.6 | 63.1 | 67.1 | 65.3 | 54.3 | 47.9 | 34.2 | 24.8 | 43 | 65.1 | 45.5 | 23.9 | 44 | 1835 |
| 1836 | 22.4 | 21.7 | 26.1 | 42.4 | 53.5 | 58.6 | 66.5 | 61.9 | 56.7 | 46.8 | 34.3 | 24.2 | 40.7 | 62.3 | 45.9 | 23 | 42.9 | 1836 |
| 1837 | 23 | 25 | 28 | 38 | 48 | 61 | 66 | 65 | 59 | 50 | 40 | 26 | 38 | 64 | 49.7 | 24.1 | 44 | 1837 |
| 1838 | 25 | 11 | 42 | 40 | 50 | 66 | 74 | 69 | 58 | 48 | 25 | 19 | 44 | 69.7 | 43.7 | 20.7 | 44 | 1838 |
| 1839 | 20 | 28 | 35 | 53 | 54 | 61 | 73 | 66 | 54 | 59 | 31 | 27 | 47.3 | 66.7 | 48 | 25.3 | 48 | 1839 |
| 1840 | 21 | 28 | 37 | 46 | 58 | 66 | 68 | 66 | 56 | 49 | 35 | 26 | 47 | 66.7 | 46.7 | 25.3 | 46 | 1840 |
| 1841 | 22 | 23 | 35 | 41 | 55 | 67 | 69 | 67 | 57 | 48 | 37 | 27 | 43.7 | 67.7 | 47.3 | 23.7 | 46 | 1841 |
| 1842 | 25 | 28 | 43 | 52 | 52 | 59 | 67 | 65 | 61 | 52 | 30 | 22 | 49.7 | 63.7 | 47.7 | 26.7 | 46 | 1842 |
| 1843 | 26 | 13 | 16 | 45 | 55 | 65 | 71 | 67 | 65 | 44 | 33 | 32 | 38 | 67.7 | 47.3 | 20.4 | 44 | 1843 |
| 1844 | 22 | 30.8 | 38.4 | 55.3 | 58.7 | 64 | 73.6 | 68 | 68.6 | 48 | 34 | 31 | 50.8 | 68.5 | 50.2 | 28.3 | 49 | 1844 |
| 1845 | 35 | 33 | 39 | 51 | 58 | 68 | 75 | 70 | 63 | 51 | 37 | 23 | 49.3 | 71 | 50.3 | 33 | 50 | 1845 |
| 1846 | 39 | 31 | 42 | 49 | 62 | 64 | 78 | 75 | 62 | 53 | 43 | 34 | 51 | 72.3 | 54 | 31 | 53 | 1846 |
| 1847 | 20 | 30 | 32 | 47 | 53 | 65 | 76 | 67 | 64 | 51 | 41 | 30 | 44 | 69.3 | 52 | 28 | 48 | 1847 |
| 1848 | 32 | 31 | 36 | 46 | 58 | 68 | 69 | 69 | 58 | 55 | 36 | 27 | 46.7 | 68.7 | 49.7 | 31 | 49 | 1848 |
| 1849 | 22 | 21 | 38 | 42 | 50 | 66 | 70 | 66 | 62 | 50 | 45 | 22 | 43.3 | 67.3 | 52.3 | 23.3 | 46 | 1849 |
| 1850 | 30 | 32 | 34 | 41 | 51 | 66 | 74 | 71 | 61 | 51 | 43 | 26 | 42 | 70.4 | 51.7 | 28 | 48 | 1850 |
| 1851 | 28 | 35 | 40 | 45 | 53 | 64 | 71 | 69 | 67 | 51 | 36 | 23 | 46 | 68 | 51.3 | 29.7 | 49 | 1851 |
| 1852 | 22 | 32 | 34 | 39 | 55 | 66 | 72 | 69 | 59 | 54 | 35 | 28 | 42.7 | 69 | 51 | 25.7 | 47 | 1852 |
| 1853 | 29.7 | 29.1 | 37 | 45 | 52 | 67 | 68 | 68 | 62 | 50 | 39 | 30 | 44.7 | 67.7 | 50.4 | 28.9 | 48 | 1853 |
| 1854 | 19 | 29 | 38 | 44 | 54 | 66 | 74 | 72 | 67 | 55 | 38 | 28 | 45.3 | 70.7 | 53.3 | 26 | 49 | 1854 |
| 1855 | 26 | 18 | 31 | 48 | 56 | 62 | 70 | 67 | 62 | 46 | 37 | 22 | 45 | 66.6 | 48.3 | 24 | 45 | 1855 |
| 1856 | 13 | 17 | 27 | 44 | 51 | 68 | 71 | 65 | 59 | 49 | 35 | 18.4 | 40.7 | 68 | 47.7 | 17.3 | 43 | 1856 |
| 1857 | 10.7 | 30.6 | 27.9 | 34.6 | 50.4 | 63.1 | 71.5 | 67.7 | 62.8 | 48.9 | 29 | 31.4 | 37.6 | 67.8 | 47.2 | 19.9 | 44.2 | 1857 |
| 1858 | 33 | 19 | 36 | 43 | 52 | 68 | 73 | 70 | 63 | 50 | 35 | 28 | 43.7 | 70.4 | 49.3 | 27.8 | 48 | 1858 |
| 1859 | 27 | 29 | 38 | 41 | 55 | 62 | 74 | 71 | 59 | 49 | 32.9 | 15.7 | 44.7 | 69 | 47 | 28 | 46 | 1859 |
| 1860 | 18.1 | 26.8 | 35.1 | 42.6 | 57.7 | 63 | 68.2 | 68.8 | 57.6 | 49.5 | 31.3 | 20.5 | 45.1 | 66.7 | 45.8 | 20.2 | 44.9 | 1860 |
| 1861 | 21.9 | 20.4 | 31.7 | 43 | 49.1 | 63.2 | 66.2 | 68.5 | 61 | 48.4 | 34.1 | 28.4 | 41.3 | 66 | 47.8 | 23.9 | 45.4 | 1861 |
| 1862 | 18.2 | 20.9 | 32.1 | 43 | 51.8 | 57 | 66.2 | 70.9 | 63.8 | 51.2 | 34 | 30.3 | 42.3 | 65.3 | 49.9 | 25.5 | 45.1 | 1862 |
| 1863 | 33.5 | 20.6 | 31 | 41.9 | 52.7 | 59.4 | 65.6 | 65.6 | 56.9 | 39.9 | 34.4 | 26.3 | 42.2 | 63.5 | 43.4 | 28.1 | 44.1 | 1863 |
| 1864 | 16.2 | 23.6 | 27.4 | 38.6 | 55.7 | 60.6 | 67.9 | 68 | 58.4 | 43 | 33.2 | 17.8 | 40.6 | 65.5 | 44.6 | 22 | 42.5 | 1864 |
| 1865 | 17.2 | 26 | 32.2 | 42.5 | 51.3 | 66.1 | 62.9 | 65.2 | 66.3 | 46.6 | 35.4 | 20.2 | 42 | 64.7 | 49.4 | 20.3 | 44.3 | 1865 |
| 1866 | 17.7 | 17.9 | 26.4 | 43.8 | 51.4 | 69.4 | 72.2 | 68.9 | 60.8 | 53.8 | 40.9 | 25.8 | 40.5 | 71.8 | 51.8 | 18.6 | 46.2 | 1866 |
| 1867 | 19.9 | 30 | 38 | 45.6 | 50.7 | 72.4 | 73.1 | 74.5 | 67.4 | 56.1 | 43.5 | 28.8 | 42.2 | 73.3 | 57.7 | 25.5 | 49.4 | 1867 |
| 1868 | 17.9 | 24.7 | 42.4 | 44.4 | 54.2 | 66 | 80.6 | 71.8 | 61.3 | 50.8 | 38 | 22.6 | 47 | 72.8 | 50 | 23.8 | 47.9 | 1868 |
| 1869 | 31.2 | 29.3 | 29.5 | 45.2 | 53.1 | 64.3 | 71.2 | 64.9 | 43.2 | 33.9 | 28.6 | | 42.6 | 69.2 | 47.3 | 27.7 | 47.2 | 1869 |
| 1870 | 25.9 | 27.5 | 32.5 | 48.4 | 62.4 | 69.3 | 76.8 | 72.7 | 68.7 | 55.1 | 42.3 | 27.1 | 47.8 | 72.9 | 55.4 | 27.3 | 50.7 | 1870 |
| 1871 | 30.9 | 30.2 | 41.2 | 51.2 | 56.7 | 66.8 | 73 | 72.7 | 61 | 54.6 | 35 | 20 | 49.7 | 70.8 | 50.2 | 29.7 | 49.4 | 1871 |
| 1872 | 23 | 25.5 | 28.1 | 47.2 | 56.1 | 69.2 | 72.2 | 71.8 | 63.9 | 50.1 | 31.5 | 19 | 43.8 | 71.1 | 48.5 | 22.8 | 46.5 | 1872 |
| 1873 | 20.4 | 24.1 | 34.3 | 43 | 53.8 | 70.3 | 70.8 | 72.1 | 62.1 | 48.9 | 34.3 | 32 | 43.7 | 71.1 | 48.4 | 21.2 | 47.2 | 1873 |
| 1874 | 28.9 | 31.4 | 36.5 | 38.6 | 59.3 | 70.5 | 74.8 | 71.8 | 66.4 | 53 | 40.3 | 38.5 | 44.8 | 72.4 | 53.2 | 30.4 | 50.4 | 1874 |
| 1875 | 17.9 | 14.7 | 31.8 | 42.5 | 55.5 | 63.1 | 68.8 | 68.4 | 61 | 47.5 | 37 | 36.8 | 43.3 | 66.8 | 48.5 | 22 | 45.4 | 1875 |
| 1876 | 33 | 31.8 | 33.9 | 46.5 | 59 | 67.5 | 73.5 | 73.5 | 61.1 | 48.8 | 39.3 | 20 | 46.5 | 71.5 | 49.7 | 33.9 | 49 | 1876 |
| 1877 | 21.9 | 36.4 | 29.4 | 45.4 | 56.9 | 66.1 | 73.1 | 71.1 | 66.5 | 54.7 | 39.7 | 42.8 | 43.9 | 70.1 | 53.6 | 26.1 | 50.3 | 1877 |
| 1878 | 31.2 | 35.7 | 44.3 | 52.2 | 55.5 | 65.4 | 74.8 | 73.6 | 65.9 | 52 | 43.1 | 23.7 | 50.7 | 71.5 | 53.7 | 36.6 | 51.4 | 1878 |
| 1879 | 21.4 | 27.4 | 39.1 | 46.8 | 57.6 | 64.7 | 73 | 72.6 | 61.2 | 59.9 | 41.9 | 30.3 | 47.8 | 70.1 | 54.3 | 24.2 | 49.9 | 1879 |
| 1880 | 40.1 | 34.6 | 37.9 | 48.5 | 64.2 | 69.9 | 72.4 | 72.4 | 62.5 | 50.8 | 31.4 | 23 | 50.2 | 71.6 | 48.2 | 35 | 50.6 | 1880 |
| 1881 | 19.5 | 24.7 | 32.2 | 41.5 | 61 | 63 | 72.9 | 75 | 69.5 | 55.9 | 39.9 | 37.1 | 44.9 | 70.3 | 55.1 | 22.4 | 49.4 | 1881 |
| 1882 | 38.3 | 38.2 | 38.3 | 45.9 | 61.7 | 63.6 | 68.6 | 71.2 | 65 | 56.5 | 41.7 | 26 | 45.3 | 67.8 | 54.4 | 34.5 | 49.6 | 1882 |
| 1883 | 26.3 | 23 | 31.4 | 45 | 52.1 | 64.1 | 71 | 68.3 | 60.7 | 51.8 | 41.5 | 30.1 | 43 | 67.8 | 51.3 | 21.8 | 46.3 | 1883 |
| 1884 | 19.2 | 27.7 | 34.2 | 44.3 | 56.7 | 65 | 69.2 | 68.8 | 68.9 | 56.4 | 39.6 | 28.4 | 45.1 | 67.7 | 55 | 25.7 | 48.2 | 1884 |
| 1885 | 18.3 | 16.8 | 30 | 45.3 | 63.8 | 65.4 | 72.8 | 68.1 | 63.9 | 51 | 41.9 | 31.1 | 42.7 | 69.1 | 52.3 | 21.2 | 46.4 | 1885 |
| 1886 | 21.4 | 28.1 | 36.1 | 49.1 | 57 | 66 | 71.4 | 72.4 | 66.1 | 56.6 | 38 | 25 | 49.7 | 69.9 | 53.6 | 26.9 | 49 | 1886 |
| 1887 | 17.3 | 27.1 | 31.9 | 47.4 | 59.4 | 67.3 | 76 | 69.7 | 62.5 | 47.3 | 38 | 28.1 | 46.2 | 70 | 49.3 | 23.1 | 47.7 | 1887 |
| 1888 | 15.1 | 23 | 30.5 | 45.4 | 62.6 | 67.4 | 72.6 | 69.4 | 59.8 | 49.1 | 41.6 | 32.2 | 42.8 | 69.8 | 50.2 | 22.1 | 46.6 | 1888 |
| 1889 | 29 | 19.9 | 38.4 | 46.8 | 56.8 | 62.3 | 70.5 | 70.6 | 62.8 | 49.4 | 38.6 | 40.6 | 47.7 | 67.8 | 50.3 | 27 | 48.8 | 1889 |
| 1890 | 30.8 | 32.4 | 29.5 | 45.6 | 53.4 | 70.2 | 72.1 | 67.6 | 60.4 | 51.4 | 41.9 | 30 | 42.8 | 70 | 51.2 | 34.6 | 48.8 | 1890 |
| 1891 | 30.2 | 28.6 | 30.6 | 47 | 53.4 | 65.7 | 67 | 69 | 69 | 52.6 | 33.8 | 35.4 | 43.7 | 67.2 | 51.8 | 29.8 | 48.5 | 1891 |
| 1892 | 19.5 | 30.2 | 31 | 44 | 52.4 | 61.4 | 71.6 | 70.9 | 63.9 | 53.6 | 34.7 | 23.4 | 42.5 | 67.9 | 50.7 | 28.4 | 46.6 | 1892 |
| 1893 | 12 | 21.5 | 33.2 | 44.3 | 52.4 | 67.8 | 73.8 | 69.8 | 64.1 | 52.6 | 36 | 25.4 | 43.3 | 70.5 | 50.9 | 18.9 | 46.1 | 1893 |
| 1894 | 27.5 | 23 | 41.2 | 46.8 | 61.1 | 71.4 | 73.4 | 70.8 | 66.2 | 52.1 | 34.4 | 32.4 | 48 | 72.5 | 50.9 | 25.3 | 49.6 | 1894 |
| 1895 | 17.5 | 17 | 31.7 | 46.1 | 59.1 | 70 | 72 | 72.5 | 68.6 | 46.2 | 36.5 | 30 | 45.6 | 70.9 | 50.4 | 22.3 | 47.1 | 1895 |
| 1896 | 27 | 26.6 | 31.3 | 53.4 | 65.4 | 67 | 72 | 72.8 | 60.5 | 49.5 | 38 | 4 | 50 | 70.7 | 49.4 | 27.8 | 49.8 | 1896 |

**PRECIPITATION AT CHICAGO, ILL., IN INCHES AND DECIMALS BY
MONTHS, SEASONS AND YEARS, FROM 1843 TO 1896, INCLUSIVE.**

| Year. | MONTHLY TOTALS. | | | | | | | | | | | | TOTALS, SEASONS AND YEARS. | | | | | |
|-------|-----------------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|----------------------------|---------|---------|---------|---------|-------|
| | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Spring. | Summer. | Autumn. | Winter. | Annual. | Year. |
| 1843 | 2.0 | 1.9 | 3.0 | 4.5 | 4.0 | 4.6 | 1.4 | 2.4 | 3.0 | 1.2 | 5.1 | 2.4 | 11.5 | 8.4 | 9.3 | ... | 35.50 | 1843 |
| 1844 | 2.8 | 1.3 | 1.76 | 2.76 | 6.0 | 5.5 | 5.0 | 4.2 | 0.8 | 1.6 | 0.7 | 0.7 | 10.52 | 14.7 | 3.1 | 6.5 | 33.12 | 1844 |
| 1845 | 2.0 | 0.5 | 2.2 | 6.5 | 2.0 | 3.8 | 3.5 | 1.2 | 4.4 | 1.4 | 3.3 | 1.5 | 10.7 | 8.5 | 9.1 | 3.2 | 32.30 | 1845 |
| 1846 | 4.9 | 1.8 | 2.6 | 7.8 | 2.4 | 4.3 | 2.9 | 1.0 | 5.0 | 0.8 | 1.5 | 5.0 | 12.8 | 8.2 | 7.3 | 8.2 | 40.00 | 1846 |
| 1847 | 2.3 | 3.5 | 1.5 | 3.1 | 3.3 | 1.5 | 2.8 | 2.0 | 3.2 | 4.6 | 4.5 | 1.2 | 6.9 | 6.3 | 12.6 | 10.8 | 32.80 | 1847 |
| 1848 | 1.6 | 2.4 | 4.9 | 3.3 | 3.2 | 4.4 | 2.4 | 5.1 | 2.2 | 2.2 | 2.1 | 8.4 | 11.6 | 12.9 | 7.5 | 5.2 | 44.40 | 1848 |
| 1849 | 5.5 | 1.0 | 4.7 | 1.8 | 3.8 | 3.6 | 2.3 | 3.5 | 2.6 | 2.8 | 1.4 | 1.2 | 10.3 | 9.4 | 6.8 | 14.9 | 34.20 | 1849 |
| 1850 | 2.1 | 0.7 | 2.0 | 3.8 | 1.9 | 3.1 | 2.1 | 6.4 | 1.4 | 2.0 | 3.2 | 1.7 | 7.7 | 11.6 | 7.6 | 4.0 | 30.40 | 1850 |
| 1851 | 1.5 | 3.8 | 0.8 | 4.2 | 6.7 | 5.3 | 3.8 | 3.1 | 3.2 | 2.3 | 2.3 | 1.6 | 11.7 | 12.2 | 7.8 | 7.0 | 38.60 | 1851 |
| 1852 | 2.0 | 1.2 | 5.5 | 4.8 | 2.4 | 2.5 | 3.4 | 0.6 | 2.3 | 6.8 | 4.0 | 3.3 | 12.7 | 6.5 | 13.1 | 4.8 | 38.80 | 1852 |
| 1853 | 1.4 | 2.2 | 1.8 | 2.8 | 4.4 | 4.9 | 6.1 | 2.2 | 4.2 | 2.0 | 2.1 | 2.3 | 9.0 | 13.2 | 9.3 | 6.9 | 36.40 | 1853 |
| 1854 | 1.3 | 1.9 | 2.1 | 2.1 | 3.1 | 2.6 | 3.0 | 0.9 | 1.6 | 3.6 | 1.0 | 1.4 | 7.3 | 6.5 | 6.2 | 5.5 | 36.60 | 1854 |
| 1855 | 8.0 | 0.6 | 2.6 | 1.4 | 2.5 | 3.7 | 5.8 | 3.2 | 2.3 | 2.0 | 2.2 | 2.0 | 6.5 | 12.7 | 6.5 | 10.0 | 36.30 | 1855 |
| 1856 | 0.9 | 1.8 | 0.6 | 2.6 | 4.8 | 2.5 | 2.1 | 1.3 | 2.5 | 2.1 | 3.98 | 3.86 | 8.0 | 6.9 | 8.55 | 4.7 | 29.04 | 1856 |
| 1857 | 1.09 | 5.43 | 2.5 | 2.19 | 6.33 | 4.14 | 3.0 | 5.0 | 2.2 | 4.0 | 2.7 | 1.2 | 11.02 | 12.14 | 8.9 | 10.38 | 39.83 | 1857 |
| 1858 | 1.3 | 1.4 | 3.0 | 3.1 | 7.8 | 6.3 | 5.9 | 3.2 | 4.0 | 4.6 | 4.5 | 2.0 | 13.9 | 15.4 | 13.1 | 3.9 | 47.10 | 1858 |
| 1859 | 1.4 | 1.8 | 5.2 | 3.4 | 3.6 | 1.7 | 0.9 | 0.4 | 2.2 | 4.1 | 2.8 | 1.8 | 12.2 | 3.0 | 9.1 | 5.2 | 29.30 | 1859 |
| 1860 | 1.6 | 1.6 | 1.0 | 2.8 | 4.6 | 3.5 | 5.3 | 2.6 | 2.8 | 4.1 | 2.3 | 4.2 | 8.4 | 11.4 | 9.2 | 5.0 | 36.40 | 1860 |
| 1861 | 1.4 | 3.0 | 3.4 | 4.7 | 3.7 | 2.1 | 4.3 | 2.4 | 3.4 | 7.5 | 1.5 | 1.9 | 11.8 | 8.8 | 12.4 | 8.6 | 39.30 | 1861 |
| 1862 | 4.0 | 0.7 | 2.0 | 5.2 | 4.3 | 2.9 | 6.7 | 3.6 | 5.6 | 2.92 | 1.2 | 1.3 | 11.5 | 13.2 | 9.72 | 6.6 | 40.42 | 1862 |
| 1863 | 2.8 | 2.6 | 2.1 | 2.1 | 5.1 | 1.3 | 2.3 | 4.2 | 1.6 | 4.0 | 1.9 | 3.6 | 9.3 | 7.8 | 7.5 | 6.7 | 33.60 | 1863 |
| 1864 | 1.6 | 0.4 | 2.1 | 3.2 | 1.9 | 2.1 | 6.4 | 1.1 | 2.1 | 1.9 | 3.1 | 2.5 | 7.3 | 9.6 | 7.1 | 5.6 | 28.40 | 1864 |
| 1865 | 0.4 | 3.1 | 2.1 | 3.8 | 1.5 | 5.1 | 6.1 | 7.2 | 4.8 | 4.0 | 0.5 | 0.6 | 8.4 | 18.5 | 9.3 | 6.0 | 40.20 | 1865 |
| 1866 | 2.8 | 1.6 | 2.2 | 2.8 | 2.0 | 4.4 | 4.7 | 4.2 | 4.6 | 2.8 | 0.8 | 3.4 | 7.0 | 13.3 | 8.2 | 5.0 | 36.30 | 1866 |
| 1867 | 1.93 | 2.22 | 1.58 | 1.70 | 4.42 | 1.86 | 1.52 | 2.33 | 0.57 | 1.28 | 1.89 | 1.11 | 7.70 | 5.71 | 3.74 | 7.55 | 22.41 | 1867 |
| 1868 | 1.28 | 0.92 | 5.24 | 3.00 | 3.74 | 3.11 | 2.87 | 3.55 | 7.08 | 1.69 | 2.60 | 1.40 | 11.98 | 9.45 | 11.37 | 3.21 | 36.48 | 1868 |
| 1869 | 1.97 | 2.23 | 1.33 | 4.30 | 5.69 | 5.03 | 3.26 | 1.32 | 0.89 | 1.10 | 2.42 | 2.03 | 11.22 | 10.61 | 4.41 | 5.60 | 31.57 | 1869 |
| 1870 | 1.95 | 0.86 | 1.81 | 1.15 | 0.80 | 1.70 | 3.71 | 2.07 | 2.82 | 2.43 | 1.16 | 2.46 | 3.76 | 7.48 | 6.41 | 4.84 | 22.92 | 1870 |
| 1871 | 4.13 | 1.45 | 2.66 | 3.79 | 3.90 | 5.56 | 2.52 | 2.01 | 0.74 | 1.88 | 3.62 | 3.44 | 10.35 | 10.10 | 12.24 | 8.04 | 35.61 | 1871 |
| 1872 | 0.68 | 0.84 | 3.79 | 3.03 | 3.24 | 3.45 | 3.09 | 2.59 | 6.43 | 0.65 | 1.06 | 0.22 | 10.06 | 9.13 | 8.14 | 5.14 | 29.07 | 1872 |
| 1873 | 2.56 | 0.47 | 0.89 | 6.22 | 7.20 | 1.44 | 4.04 | 1.58 | 3.53 | 2.43 | 1.61 | 4.44 | 14.31 | 7.06 | 7.57 | 3.25 | 36.41 | 1873 |
| 1874 | 3.47 | 1.51 | 2.15 | 2.67 | 2.08 | 3.25 | 0.58 | 3.15 | 3.76 | 2.55 | 2.83 | 0.63 | 6.90 | 6.98 | 9.14 | 9.42 | 28.63 | 1874 |
| 1875 | 0.96 | 1.99 | 1.43 | 2.32 | 3.64 | 5.17 | 7.18 | 3.28 | 4.39 | 4.32 | 0.75 | 2.62 | 7.39 | 15.60 | 9.46 | 3.58 | 38.06 | 1875 |
| 1876 | 3.22 | 3.90 | 4.04 | 2.07 | 1.85 | 5.96 | 3.11 | 3.66 | 3.74 | 1.20 | 3.25 | 0.48 | 9.96 | 12.73 | 8.29 | 9.74 | 36.48 | 1876 |
| 1877 | 1.91 | 0.06 | 5.37 | 2.42 | 1.81 | 6.04 | 2.98 | 3.06 | 2.02 | 6.15 | 6.08 | 2.75 | 9.60 | 12.08 | 14.25 | 2.45 | 41.01 | 1877 |
| 1878 | 1.31 | 2.12 | 4.39 | 5.57 | 5.22 | 3.02 | 6.09 | 3.66 | 1.99 | 5.17 | 0.83 | 2.58 | 15.18 | 12.77 | 7.99 | 6.18 | 41.95 | 1878 |
| 1879 | 0.54 | 1.47 | 2.37 | 1.93 | 3.89 | 3.18 | 5.58 | 0.45 | 1.18 | 2.72 | 4.93 | 2.47 | 8.19 | 9.21 | 8.83 | 4.59 | 30.71 | 1879 |
| 1880 | 3.53 | 2.91 | 2.25 | 5.20 | 4.97 | 3.50 | 3.07 | 4.47 | 2.25 | 3.19 | 0.87 | 1.11 | 12.42 | 10.04 | 6.31 | 8.91 | 37.32 | 1880 |
| 1881 | 0.87 | 5.98 | 2.99 | 1.84 | 1.85 | 5.93 | 4.31 | 0.54 | 4.34 | 6.89 | 5.97 | 2.67 | 6.68 | 10.78 | 17.21 | 8.06 | 44.18 | 1881 |
| 1882 | 1.55 | 2.24 | 3.43 | 6.72 | 5.52 | 5.71 | 3.43 | 4.96 | 0.91 | 3.40 | 1.48 | 1.99 | 15.67 | 14.00 | 5.97 | 6.46 | 41.34 | 1882 |
| 1883 | 1.74 | 4.74 | 0.42 | 3.72 | 7.32 | 5.61 | 5.53 | 1.21 | 1.36 | 1.36 | 2.62 | 1.59 | 11.46 | 12.35 | 13.98 | 8.47 | 45.86 | 1883 |
| 1884 | 1.39 | 3.27 | 5.16 | 3.05 | 1.53 | 2.11 | 3.71 | 2.50 | 2.29 | 3.59 | 1.80 | 4.21 | 9.74 | 8.32 | 7.68 | 6.25 | 34.61 | 1884 |
| 1885 | 2.18 | 2.01 | 0.57 | 4.00 | 3.17 | 5.20 | 2.44 | 11.28 | 2.97 | 3.87 | 2.33 | 3.35 | 7.74 | 18.92 | 9.17 | 9.40 | 44.37 | 1885 |
| 1886 | 3.66 | 1.51 | 1.79 | 1.29 | 1.00 | 0.94 | 1.53 | 3.38 | 6.93 | 1.42 | 1.66 | 1.76 | 4.08 | 5.85 | 10.01 | 8.42 | 26.77 | 1886 |
| 1887 | 3.13 | 1.50 | 0.89 | 0.46 | 1.38 | 1.63 | 1.05 | 3.35 | 4.03 | 2.03 | 2.41 | 3.67 | 2.63 | 6.03 | 4.47 | 9.99 | 29.13 | 1887 |
| 1888 | 1.56 | 1.51 | 2.99 | 2.13 | 6.22 | 1.66 | 3.33 | 2.10 | 0.98 | 2.95 | 2.89 | 1.94 | 11.34 | 7.69 | 6.72 | 6.74 | 30.86 | 1888 |
| 1889 | 1.64 | 1.31 | 1.43 | 2.35 | 5.38 | 2.93 | 9.56 | 0.39 | 2.75 | 1.82 | 3.49 | 1.90 | 9.18 | 12.88 | 8.06 | 4.09 | 34.95 | 1889 |
| 1890 | 2.98 | 2.42 | 2.10 | 3.23 | 5.13 | 3.25 | 2.57 | 2.58 | 1.39 | 2.20 | 1.59 | 1.25 | 10.46 | 8.40 | 7.18 | 7.30 | 32.69 | 1890 |
| 1891 | 1.99 | 1.95 | 2.13 | 3.14 | 2.09 | 2.42 | 2.47 | 4.52 | 0.32 | 0.36 | 2.83 | 1.32 | 7.36 | 9.41 | 4.51 | 5.19 | 26.54 | 1891 |
| 1892 | 1.99 | 1.57 | 2.21 | 2.17 | 6.77 | 10.58 | 2.23 | 1.85 | 1.34 | 1.54 | 2.68 | 1.63 | 11.15 | 14.66 | 5.56 | 4.88 | 36.56 | 1892 |
| 1893 | 2.08 | 2.44 | 1.69 | 4.16 | 1.93 | 3.59 | 3.08 | 0.18 | 1.98 | 1.75 | 2.45 | 2.14 | 7.78 | 6.85 | 6.18 | 6.15 | 27.47 | 1893 |
| 1894 | 1.55 | 2.15 | 2.66 | 2.65 | 3.35 | 1.96 | 0.60 | 0.60 | 8.28 | 0.84 | 1.18 | 1.66 | 8.66 | 3.16 | 10.30 | 5.84 | 27.46 | 1894 |
| 1895 | 2.15 | 1.60 | 1.32 | 0.86 | 1.99 | 1.79 | 2.42 | 6.49 | 0.89 | 0.51 | 5.60 | 6.76 | 4.17 | 10.70 | 7.00 | 5.41 | 32.35 | 1895 |
| 1896 | 1.12 | 3.48 | 1.28 | 2.79 | 4.16 | 2.83 | 3.61 | 3.52 | 6.70 | 1.36 | 2.16 | 0.16 | 8.21 | 9.96 | 10.22 | 11.36 | 33.14 | 1896 |

Tables of meteorological data for Chicago are furnished through the courtesy of the Chief and local officers of the United States Weather Bureau, Department of Agriculture.

MONTHLY MEAN BAR. PRESSURE—ANNUAL MEANS, FROM
1873 TO 1896—FOR CHICAGO.

| YEAR. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Annual. |
|-----------|----------|-----------|--------|--------|-------|-------|-------|---------|------------|----------|-----------|-----------|---------|
| 1873..... | 29.13 | 29.14 | 29.14 | 29.05 | 29.02 | 29.10 | 29.13 | 29.17 | 29.17 | 29.15 | 29.11 | 29.21 | 29.13 |
| 1874..... | .21 | .22 | .18 | .19 | .11 | .09 | .13 | .13 | .16 | .21 | .19 | .22 | .17 |
| 1875..... | .31 | .19 | .10 | .10 | .06 | .10 | .12 | .10 | .17 | .10 | .17 | .03 | .13 |
| 1876..... | .16 | .15 | .10 | .09 | .10 | .02 | .12 | .16 | .12 | .06 | .10 | .18 | .11 |
| 1877..... | .22 | .27 | .14 | .07 | .15 | .04 | .09 | .09 | .14 | .11 | .14 | .19 | .14 |
| 1878..... | .14 | .05 | .04 | 28.91 | .06 | .06 | .11 | .04 | .18 | .12 | .15 | .16 | .08 |
| 1879..... | .22 | .19 | .18 | 29.13 | .16 | .13 | .10 | .11 | .21 | .25 | .18 | .19 | .17 |
| 1880..... | .13 | .16 | .19 | .06 | .11 | .10 | .12 | .16 | .18 | .18 | .28 | .21 | .16 |
| 1881..... | .23 | .21 | .00 | .13 | .15 | .07 | .15 | .15 | .09 | .20 | .18 | .21 | .15 |
| 1882..... | .23 | .13 | .16 | .15 | .11 | .02 | .15 | .12 | .21 | .14 | .25 | .20 | .16 |
| 1883..... | .23 | .35 | .15 | .07 | .06 | .06 | .12 | .20 | .20 | .22 | .19 | .19 | .17 |
| 1884..... | .25 | .13 | .13 | .07 | .07 | .16 | .06 | .17 | .15 | .24 | .19 | .20 | .15 |
| 1885..... | .22 | .10 | .18 | .13 | .05 | .15 | .10 | .11 | .16 | .11 | .09 | .15 | .13 |
| 1886..... | .15 | .17 | .08 | .17 | .09 | .12 | .11 | .11 | .17 | .30 | .13 | .27 | .16 |
| 1887..... | .16 | .23 | .18 | .07 | .11 | .11 | .10 | .14 | .20 | .17 | .17 | .16 | .15 |
| 1888..... | .31 | .14 | .20 | .25 | .04 | .05 | .16 | .16 | .19 | .09 | .24 | .17 | .17 |
| 1889..... | .03 | .21 | .11 | .13 | .07 | .10 | .10 | .20 | .14 | .25 | .18 | .15 | .14 |
| 1890..... | .23 | .16 | .18 | .21 | .14 | .11 | .14 | .19 | .23 | .06 | .17 | .20 | .16 |
| 1891..... | .16 | .11 | .14 | .12 | .23 | .07 | .16 | .12 | .25 | .22 | .17 | .14 | .16 |
| 1892..... | .20 | .20 | .17 | .15 | .02 | .06 | .20 | .15 | .21 | .18 | .17 | .20 | .16 |
| 1893..... | .08 | .19 | .11 | .01 | .03 | .10 | .10 | .15 | .12 | .13 | .14 | .18 | .11 |
| 1894..... | .17 | .20 | .11 | .12 | .07 | .13 | .16 | .17 | .17 | .06 | .17 | .19 | .14 |
| 1895..... | .10 | .22 | .14 | .12 | .13 | .17 | .14 | .08 | .14 | .18 | .21 | 30.00 | .25 |
| 1896..... | 29.23 | 29.04 | 26.16 | 29.14 | 29.07 | 29.11 | 29.15 | 29.16 | 29.15 | 29.17 | 29.21 | 29.27 | 29.16 |

MAXIMUM DAILY PRESSURE, 1896.

| DATE. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
|------------|----------|-----------|--------|--------|-------|-------|-------|---------|------------|----------|-----------|-----------|
| 1..... | 29.13 | 29.10 | 29.24 | 29.06 | 28.96 | 29.34 | 29.34 | 29.16 | 29.38 | 29.36 | 29.09 | 29.70 |
| 2..... | 29.10 | 29.11 | 29.55 | 29.20 | 29.02 | 29.35 | 29.22 | 29.14 | 29.23 | 29.31 | 29.08 | 21.61 |
| 3..... | 29.62 | 28.73 | 29.59 | 29.49 | 29.14 | 29.24 | 29.19 | 29.17 | 29.35 | 29.31 | 29.25 | 29.67 |
| 4..... | 29.69 | 28.84 | 29.55 | 29.50 | 29.09 | 29.10 | 29.11 | 29.15 | 28.35 | 29.32 | 29.00 | 29.11 |
| 5..... | 29.57 | 28.85 | 29.37 | 29.46 | 29.14 | 29.13 | 29.17 | 29.06 | 29.00 | 29.29 | 29.02 | 28.95 |
| 6..... | 29.29 | 28.85 | 28.93 | 29.49 | 29.27 | 29.13 | 29.24 | 29.17 | 29.12 | 29.39 | 29.12 | 29.20 |
| 7..... | 29.38 | 29.08 | 29.20 | 26.56 | 29.35 | 29.05 | 29.35 | 29.20 | 29.18 | 29.49 | 29.10 | 29.36 |
| 8..... | 29.34 | 29.12 | 29.31 | 29.56 | 29.39 | 28.93 | 29.31 | 29.10 | 29.18 | 29.51 | 29.10 | 29.30 |
| 9..... | 29.15 | 28.93 | 29.25 | 29.26 | 29.39 | 29.03 | 29.20 | 29.10 | 29.11 | 29.45 | 20.15 | 29.10 |
| 10..... | 29.21 | 29.00 | 28.97 | 29.35 | 29.22 | 29.16 | 29.28 | 29.14 | 29.09 | 29.32 | 29.06 | 29.20 |
| 11..... | 29.14 | 29.32 | 28.99 | 29.16 | 29.11 | 29.22 | 26.33 | 29.16 | 29.18 | 29.25 | 29.28 | 29.72 |
| 12..... | 29.24 | 29.34 | 29.30 | 29.15 | 29.02 | 29.02 | 29.26 | 29.26 | 29.36 | 29.29 | 29.42 | 28.91 |
| 13..... | 29.40 | 29.21 | 29.59 | 28.98 | 29.00 | 29.12 | 29.15 | 29.27 | 29.45 | 29.31 | 29.49 | 29.10 |
| 14..... | 29.64 | 29.33 | 29.71 | 28.99 | 29.02 | 29.21 | 29.12 | 29.23 | 29.32 | 29.26 | 29.38 | 29.16 |
| 15..... | 29.64 | 29.36 | 29.48 | 29.03 | 29.24 | 29.25 | 29.12 | 29.19 | 29.30 | 29.14 | 29.04 | 29.34 |
| 16..... | 29.39 | 29.62 | 29.19 | 29.17 | 29.21 | 29.26 | 29.24 | 29.32 | 29.18 | 29.10 | 29.12 | 29.42 |
| 17..... | 29.33 | 29.62 | 29.29 | 29.18 | 29.02 | 29.19 | 29.31 | 29.36 | 29.03 | 29.14 | 29.25 | 29.28 |
| 18..... | 29.20 | 29.13 | 29.26 | 29.06 | 29.05 | 29.19 | 29.31 | 29.38 | 29.09 | 29.23 | 29.39 | 29.49 |
| 19..... | 29.28 | 29.12 | 29.22 | 29.24 | 29.20 | 29.11 | 29.23 | 29.51 | 29.38 | 29.22 | 29.63 | 29.48 |
| 20..... | 29.25 | 29.51 | 29.33 | 29.22 | 29.19 | 29.10 | 29.10 | 29.39 | 29.40 | 29.05 | 29.64 | 29.26 |
| 21..... | 29.31 | 29.60 | 29.14 | 29.26 | 29.14 | 29.07 | 29.17 | 29.09 | 29.15 | 29.21 | 29.52 | 29.20 |
| 22..... | 29.20 | 29.39 | 29.57 | 29.37 | 29.34 | 29.16 | 29.23 | 28.95 | 29.49 | 29.26 | 29.63 | 29.11 |
| 23..... | 29.00 | 29.19 | 29.65 | 29.27 | 29.35 | 29.11 | 29.27 | 29.20 | 29.52 | 29.14 | 29.39 | 29.66 |
| 24..... | 29.00 | 28.38 | 29.62 | 29.17 | 29.26 | 29.14 | 29.12 | 29.28 | 29.33 | 29.16 | 29.63 | 29.81 |
| 25..... | 29.38 | 29.42 | 29.09 | 29.25 | 29.01 | 29.32 | 29.22 | 29.19 | 29.18 | 29.19 | 29.39 | 29.73 |
| 26..... | 29.54 | 28.87 | 29.23 | 29.11 | 29.04 | 29.44 | 29.16 | 29.27 | 29.31 | 29.20 | 29.09 | 29.66 |
| 27..... | 29.49 | 28.70 | 29.24 | 29.13 | 29.07 | 29.32 | 29.06 | 29.49 | 29.40 | 29.24 | 29.36 | 28.80 |
| 28..... | 29.40 | 28.97 | 28.98 | 29.14 | 29.10 | 29.06 | 29.14 | 29.56 | 29.40 | 29.14 | 29.66 | 29.65 |
| 29..... | 29.31 | 29.02 | 28.88 | 29.07 | 29.15 | 29.31 | 29.13 | 29.40 | 29.07 | 29.14 | 29.73 | 29.47 |
| 30..... | 29.39 | ..... | 29.16 | 28.96 | 29.04 | 29.37 | 29.25 | 29.13 | 29.14 | 28.84 | 29.76 | 29.47 |
| 31..... | 29.28 | ..... | 29.17 | ..... | 29.19 | ..... | 29.33 | 29.25 | ..... | 28.95 | ..... | 29.45 |
| Means..... | 29.33 | 29.16 | 29.29 | 29.22 | 29.15 | 29.18 | 29.22 | 29.24 | 29.26 | 29.23 | 29.32 | 29.43 |

Year 1896, 29.26 inches.

MINIMUM DAILY PRESSURE, 1896.

| DATE. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
|-------------|----------|-----------|--------|--------|-------|-------|-------|---------|------------|----------|-----------|-----------|
| 1 | 28.86 | 29.00 | 28.94 | 28.80 | 28.72 | 29.21 | 29.21 | 28.93 | 29.23 | 29.15 | 28.94 | 19.60 |
| 2 | 28.80 | 28.77 | 29.24 | 29.01 | 28.78 | 29.23 | 29.11 | 29.03 | 28.97 | 29.26 | 28.93 | 29.45 |
| 3 | 29.13 | 28.60 | 29.54 | 29.20 | 29.04 | 29.09 | 29.07 | 29.04 | 29.05 | 29.25 | 28.99 | 29.15 |
| 4 | 29.55 | 28.71 | 29.38 | 29.40 | 29.04 | 29.00 | 29.05 | 29.04 | 29.04 | 29.26 | 28.91 | 28.91 |
| 5 | 29.34 | 28.72 | 28.91 | 29.36 | 29.08 | 29.04 | 29.05 | 28.98 | 28.80 | 29.25 | 28.64 | 28.78 |
| 6 | 29.06 | 28.68 | 28.85 | 29.41 | 29.15 | 29.01 | 29.02 | 29.06 | 28.92 | 29.28 | 28.97 | 28.99 |
| 7 | 29.07 | 28.86 | 28.90 | 29.42 | 29.27 | 28.95 | 29.24 | 26.11 | 29.09 | 29.40 | 28.98 | 29.21 |
| 8 | 28.95 | 28.95 | 29.20 | 29.30 | 29.27 | 28.78 | 29.20 | 28.96 | 29.09 | 29.41 | 29.05 | 29.04 |
| 9 | 28.97 | 28.87 | 28.91 | 28.99 | 29.18 | 28.80 | 29.12 | 29.00 | 29.05 | 29.30 | 29.06 | 28.93 |
| 10 | 29.15 | 28.66 | 28.90 | 29.04 | 29.09 | 29.03 | 29.16 | 29.06 | 28.89 | 29.23 | 28.67 | 28.98 |
| 11 | 28.77 | 29.02 | 28.80 | 29.03 | 29.00 | 29.04 | 29.22 | 29.06 | 28.96 | 29.16 | 28.75 | 29.00 |
| 12 | 28.90 | 28.95 | 28.99 | 28.99 | 28.93 | 28.85 | 29.10 | 29.16 | 29.18 | 29.19 | 29.29 | 28.73 |
| 13 | 29.25 | 28.90 | 29.30 | 28.65 | 28.87 | 28.90 | 29.09 | 29.19 | 29.32 | 29.26 | 29.39 | 28.75 |
| 14 | 29.41 | 28.99 | 29.51 | 28.75 | 28.71 | 29.12 | 28.90 | 29.11 | 29.20 | 29.15 | 29.03 | 29.11 |
| 15 | 29.40 | 28.95 | 29.17 | 28.94 | 29.04 | 29.18 | 28.88 | 29.07 | 29.20 | 29.04 | 29.00 | 29.13 |
| 16 | 29.28 | 29.37 | 29.11 | 29.03 | 28.82 | 29.19 | 29.10 | 29.14 | 28.88 | 29.02 | 29.04 | 29.29 |
| 17 | 29.22 | 29.18 | 29.18 | 29.04 | 28.77 | 29.11 | 29.24 | 29.28 | 28.91 | 29.00 | 29.10 | 28.93 |
| 18 | 29.05 | 28.76 | 29.00 | 28.88 | 28.97 | 29.10 | 29.20 | 29.27 | 29.02 | 29.14 | 28.96 | 28.93 |
| 19 | 29.18 | 28.77 | 28.91 | 28.98 | 29.03 | 29.01 | 29.07 | 29.39 | 29.01 | 28.85 | 29.40 | 29.24 |
| 20 | 29.16 | 29.12 | 29.15 | 29.01 | 29.08 | 29.01 | 29.04 | 29.10 | 29.16 | 28.94 | 29.32 | 29.12 |
| 21 | 29.21 | 29.40 | 28.76 | 29.05 | 29.05 | 28.98 | 29.09 | 28.93 | 29.05 | 29.02 | 29.20 | 29.09 |
| 22 | 29.03 | 29.11 | 29.13 | 29.26 | 29.15 | 29.07 | 29.07 | 28.80 | 29.14 | 29.15 | 29.41 | 28.76 |
| 23 | 28.78 | 29.06 | 29.54 | 28.96 | 29.26 | 29.04 | 29.02 | 28.98 | 29.32 | 28.88 | 29.17 | 29.13 |
| 24 | 28.75 | 29.18 | 29.12 | 28.93 | 29.01 | 29.05 | 28.93 | 29.19 | 29.09 | 28.90 | 29.36 | 29.66 |
| 25 | 29.00 | 28.87 | 28.70 | 29.12 | 28.69 | 29.08 | 29.13 | 28.97 | 29.03 | 29.08 | 29.11 | 29.33 |
| 26 | 29.40 | 28.68 | 28.79 | 28.95 | 28.87 | 29.32 | 28.88 | 28.98 | 29.20 | 29.10 | 28.66 | 29.31 |
| 27 | 29.37 | 28.53 | 28.99 | 28.93 | 28.66 | 28.93 | 28.93 | 29.28 | 29.26 | 29.11 | 28.72 | 29.64 |
| 28 | 29.25 | 28.71 | 28.39 | 29.06 | 28.64 | 28.86 | 29.06 | 29.40 | 29.10 | 29.08 | 29.38 | 29.41 |
| 29 | 29.21 | 28.92 | 28.49 | 28.90 | 29.03 | 29.03 | 29.02 | 29.15 | 28.56 | 28.72 | 29.65 | 29.41 |
| 30 | 29.30 | ..... | 28.89 | 28.87 | 28.82 | 29.28 | 29.04 | 28.94 | 28.41 | 28.67 | 29.63 | 29.38 |
| 31 | 29.02 | ..... | 28.90 | ..... | 29.01 | ..... | 29.17 | 29.00 | ..... | 28.82 | ..... | 29.23 |
| Means | 29.12 | 28.91 | 29.02 | 29.04 | 28.97 | 29.04 | 29.08 | 29.08 | 29.04 | 29.10 | 29.09 | 29.15 |

Year 1896, 29.05 inches.

MEAN DAILY PRESSURE, 1896.

| DATE. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
|------------|----------|-----------|--------|--------|-------|-------|-------|---------|------------|----------|-----------|-----------|
| 1..... | 29.00 | 29.04 | 29.07 | 28.95 | 28.87 | 29.28 | 29.28 | 29.02 | 29.30 | 29.30 | 29.02 | 29.65 |
| 2..... | 28.90 | 28.97 | 29.44 | 29.10 | 28.88 | 29.28 | 29.18 | 29.10 | 29.09 | 29.28 | 29.02 | 29.52 |
| 3..... | 29.40 | 28.66 | 29.57 | 29.31 | 29.09 | 29.17 | 29.14 | 29.10 | 29.26 | 29.27 | 29.13 | 29.37 |
| 4..... | 29.63 | 28.78 | 29.49 | 29.46 | 29.07 | 29.06 | 29.07 | 29.08 | 29.23 | 29.29 | 28.95 | 28.99 |
| 5..... | 29.49 | 28.78 | 29.14 | 29.42 | 29.11 | 29.10 | 29.11 | 29.03 | 28.89 | 29.27 | 28.81 | 28.86 |
| 6..... | 29.14 | 28.74 | 28.88 | 29.45 | 29.23 | 29.08 | 29.13 | 29.12 | 29.03 | 29.33 | 29.04 | 29.12 |
| 7..... | 29.24 | 28.98 | 29.05 | 29.51 | 29.32 | 29.01 | 29.30 | 29.16 | 29.14 | 29.44 | 29.06 | 29.31 |
| 8..... | 29.35 | 29.04 | 29.26 | 29.47 | 29.32 | 28.82 | 29.27 | 29.03 | 29.12 | 29.46 | 29.08 | 29.14 |
| 9..... | 29.08 | 28.89 | 29.08 | 29.02 | 29.24 | 28.91 | 29.14 | 29.04 | 29.07 | 29.39 | 29.10 | 29.02 |
| 10..... | 29.17 | 28.84 | 28.94 | 29.20 | 29.16 | 29.12 | 29.23 | 29.09 | 28.98 | 29.28 | 28.88 | 29.06 |
| 11..... | 28.98 | 29.20 | 28.88 | 29.13 | 29.06 | 29.14 | 29.28 | 29.11 | 29.08 | 29.21 | 29.07 | 29.13 |
| 12..... | 29.11 | 29.16 | 29.14 | 29.07 | 28.98 | 28.92 | 29.19 | 29.23 | 29.29 | 29.24 | 29.37 | 28.84 |
| 13..... | 29.30 | 29.05 | 29.46 | 28.82 | 28.95 | 29.00 | 29.12 | 29.24 | 29.36 | 29.29 | 29.44 | 28.94 |
| 14..... | 29.57 | 29.21 | 29.62 | 28.90 | 28.83 | 29.18 | 29.02 | 29.18 | 29.25 | 29.21 | 29.16 | 29.13 |
| 15..... | 29.56 | 29.11 | 29.28 | 28.99 | 29.18 | 29.22 | 29.00 | 29.14 | 29.24 | 29.09 | 29.02 | 29.23 |
| 16..... | 29.33 | 29.52 | 29.14 | 29.12 | 29.08 | 29.23 | 29.20 | 29.25 | 29.01 | 29.06 | 29.07 | 29.34 |
| 17..... | 29.27 | 29.47 | 29.24 | 29.12 | 28.93 | 29.16 | 29.28 | 29.32 | 28.97 | 29.07 | 29.19 | 29.09 |
| 18..... | 29.13 | 28.93 | 29.15 | 28.98 | 29.00 | 29.14 | 29.27 | 29.31 | 29.05 | 29.20 | 29.11 | 29.24 |
| 19..... | 29.23 | 28.92 | 29.03 | 29.18 | 29.14 | 29.07 | 29.16 | 29.45 | 29.21 | 29.03 | 29.57 | 29.38 |
| 20..... | 29.20 | 29.33 | 29.26 | 29.09 | 29.14 | 29.06 | 29.07 | 29.26 | 29.30 | 29.01 | 29.52 | 29.16 |
| 21..... | 29.26 | 29.52 | 28.94 | 29.16 | 29.08 | 29.04 | 29.12 | 28.99 | 29.10 | 29.15 | 29.31 | 29.16 |
| 22..... | 29.12 | 29.25 | 29.44 | 29.31 | 29.26 | 29.11 | 29.13 | 28.86 | 29.36 | 29.21 | 29.55 | 28.91 |
| 23..... | 28.86 | 29.12 | 29.60 | 29.12 | 29.31 | 29.08 | 29.18 | 29.11 | 29.44 | 28.98 | 29.26 | 29.46 |
| 24..... | 28.82 | 29.26 | 29.44 | 29.07 | 29.17 | 29.10 | 29.03 | 29.24 | 29.24 | 29.08 | 29.51 | 29.76 |
| 25..... | 29.20 | 29.22 | 28.83 | 29.18 | 28.81 | 29.18 | 29.17 | 29.08 | 29.08 | 29.13 | 29.26 | 29.51 |
| 26..... | 29.49 | 28.82 | 29.09 | 29.02 | 28.96 | 29.37 | 29.02 | 29.14 | 29.25 | 29.14 | 28.83 | 29.50 |
| 27..... | 29.42 | 28.58 | 29.15 | 29.04 | 28.94 | 29.11 | 29.01 | 29.41 | 29.36 | 29.18 | 29.08 | 29.71 |
| 28..... | 29.33 | 28.85 | 28.62 | 29.11 | 28.91 | 28.99 | 29.12 | 29.50 | 29.28 | 29.11 | 29.55 | 29.57 |
| 29..... | 29.25 | 28.97 | 28.67 | 28.98 | 29.10 | 29.18 | 29.08 | 29.29 | 28.86 | 28.97 | 29.69 | 29.44 |
| 30..... | 29.34 | ..... | 29.06 | 28.90 | 28.94 | 29.33 | 29.14 | 29.02 | 28.75 | 28.75 | 29.69 | 29.42 |
| 31..... | 29.14 | ..... | 29.05 | ..... | 29.11 | ..... | 29.26 | 29.14 | ..... | 28.90 | ..... | 29.37 |
| Means..... | 29.23 | 29.04 | 29.16 | 29.14 | 29.07 | 29.11 | 29.15 | 29.16 | 29.15 | 29.17 | 29.21 | 29.27 |

Year 1896, 29.16 inches.

DAILY MAXIMUM TEMPERATURE, 1896.

| DATE. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
|------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|
| 1..... | 30 | 38 | 22 | 58 | 76 | 57 | 86 | 81 | 73 | 58 | 55 | 23 |
| 2..... | 33 | 37 | 28 | 32 | 67 | 61 | 87 | 74 | 85 | 56 | 69 | 26 |
| 3..... | 3 | 32 | 28 | 43 | 77 | 60 | 85 | 86 | 68 | 57 | 58 | 33 |
| 4..... | 5 | 32 | 30 | 35 | 71 | 77 | 75 | 94 | 64 | 60 | 58 | 33 |
| 5..... | 12 | 36 | 38 | 53 | 70 | 87 | 70 | 95 | 68 | 67 | 38 | 49 |
| 6..... | 28 | 34 | 42 | 48 | 73 | 84 | 70 | 85 | 64 | 55 | 47 | 40 |
| 7..... | 32 | 31 | 32 | 35 | 83 | 89 | 68 | 82 | 73 | 47 | 40 | 39 |
| 8..... | 31 | 29 | 35 | 41 | 86 | 77 | 71 | 98 | 77 | 49 | 30 | 43 |
| 9..... | 34 | 32 | 36 | 46 | 89 | 64 | 73 | 93 | 87 | 57 | 36 | 50 |
| 10..... | 38 | 39 | 34 | 60 | 89 | 63 | 83 | 93 | 88 | 66 | 48 | 53 |
| 11..... | 38 | 28 | 28 | 75 | 84 | 70 | 88 | 92 | 63 | 59 | 44 | 52 |
| 12..... | 23 | 25 | 14 | 80 | 85 | 69 | 91 | 76 | 66 | 56 | 32 | 57 |
| 13..... | 25 | 28 | 22 | 70 | 79 | 71 | 92 | 75 | 75 | 57 | 30 | 43 |
| 14..... | 35 | 40 | 26 | 73 | 74 | 79 | 93 | 85 | 68 | 62 | 52 | 38 |
| 15..... | 32 | 40 | 28 | 80 | 77 | 72 | 82 | 83 | 65 | 66 | 62 | 36 |
| 16..... | 41 | 19 | 34 | 84 | 65 | 66 | 63 | 75 | 72 | 51 | 70 | 40 |
| 17..... | 42 | 22 | 37 | 83 | 77 | 72 | 72 | 70 | 65 | 47 | 63 | 41 |
| 18..... | 37 | 25 | 38 | 83 | 74 | 77 | 69 | 70 | 62 | 42 | 65 | 35 |
| 19..... | 30 | 12 | 32 | 68 | 59 | 85 | 71 | 65 | 55 | 46 | 33 | 26 |
| 20..... | 40 | 7 | 35 | 72 | 60 | 82 | 85 | 78 | 62 | 43 | 35 | 30 |
| 21..... | 35 | 19 | 52 | 58 | 78 | 76 | 79 | 74 | 68 | 53 | 37 | 25 |
| 22..... | 29 | 38 | 40 | 45 | 69 | 74 | 85 | 84 | 55 | 50 | 43 | 32 |
| 23..... | 35 | 41 | 29 | 58 | 59 | 69 | 71 | 76 | 61 | 50 | 51 | 30 |
| 24..... | 38 | 39 | 42 | 73 | 84 | 69 | 66 | 71 | 70 | 44 | 51 | 26 |
| 25..... | 34 | 39 | 57 | 61 | 81 | 86 | 78 | 83 | 71 | 56 | 61 | 31 |
| 26..... | 27 | 47 | 50 | 68 | 76 | 72 | 91 | 72 | 62 | 67 | 63 | 34 |
| 27..... | 40 | 58 | 38 | 62 | 73 | 81 | 85 | 65 | 54 | 70 | 58 | 39 |
| 28..... | 32 | 45 | 57 | 80 | 65 | 72 | 81 | 68 | 55 | 75 | 16 | 44 |
| 29..... | 48 | 30 | 57 | 75 | 72 | 69 | 92 | 79 | 57 | 71 | 18 | 42 |
| 30..... | 50 | ..... | 52 | 68 | 76 | 86 | 83 | 81 | 66 | 64 | 14 | 48 |
| 31..... | 45 | ..... | 58 | ..... | 57 | ..... | 73 | 69 | ..... | 49 | ..... | 50 |
| Means..... | 32.3 | 32.5 | 37.3 | 62.2 | 74.5 | 73.9 | 79.3 | 79.7 | 67.3 | 56.1 | 45.9 | 38.3 |

Year 1896: 56.6.

DAILY MINIMUM TEMPERATURE, 1896.

| DATE. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
|-------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|
| 1..... | 10 | 30 | 22 | 29 | 56 | 51 | 69 | 68 | 60 | 51 | 36 | 8 |
| 2..... | 16 | 29 | 14 | 18 | 55 | 52 | 72 | 65 | 60 | 52 | 50 | 17 |
| 3..... | -4 | 30 | 25 | 25 | 56 | 52 | 69 | 68 | 58 | 54 | 45 | 18 |
| 4..... | -9 | 27 | 24 | 31 | 54 | 56 | 64 | 69 | 57 | 49 | 40 | 24 |
| 5..... | -3 | 21 | 24 | 33 | 54 | 62 | 61 | 73 | 52 | 49 | 31 | 33 |
| 6..... | 10 | 27 | 30 | 34 | 60 | 71 | 61 | 73 | 48 | 46 | 25 | 32 |
| 7..... | 26 | 21 | 24 | 28 | 64 | 63 | 60 | 72 | 54 | 38 | 29 | 32 |
| 8..... | 26 | 23 | 24 | 32 | 67 | 63 | 63 | 76 | 58 | 37 | 26 | 32 |
| 9..... | 26 | 19 | 28 | 32 | 69 | 50 | 64 | 73 | 66 | 43 | 23 | 28 |
| 10..... | 30 | 22 | 28 | 37 | 69 | 51 | 64 | 78 | 63 | 46 | 35 | 33 |
| 11..... | 30 | 20 | 13 | 49 | 66 | 55 | 68 | 70 | 57 | 52 | 31 | 33 |
| 12..... | 14 | 19 | 6 | 60 | 63 | 53 | 68 | 70 | 62 | 49 | 23 | 41 |
| 13..... | 13 | 17 | 6 | 57 | 59 | 54 | 70 | 70 | 61 | 52 | 18 | 35 |
| 14..... | 10 | 16 | 13 | 51 | 54 | 64 | 68 | 72 | 63 | 49 | 30 | 33 |
| 15..... | 23 | 17 | 21 | 58 | 51 | 58 | 58 | 68 | 59 | 49 | 42 | 32 |
| 16..... | 22 | 12 | 25 | 64 | 56 | 58 | 56 | 68 | 61 | 46 | 51 | 31 |
| 17..... | 31 | 8 | 29 | 47 | 56 | 60 | 62 | 58 | 59 | 33 | 45 | 30 |
| 18..... | 29 | 13 | 31 | 66 | 57 | 63 | 62 | 60 | 53 | 34 | 31 | 24 |
| 19..... | 22 | -6 | 28 | 52 | 46 | 67 | 64 | 60 | 46 | 31 | 27 | 21 |
| 20..... | 29 | -9 | 20 | 48 | 50 | 65 | 66 | 58 | 42 | 29 | 29 | 21 |
| 21..... | 27 | -3 | 32 | 44 | 59 | 67 | 69 | 68 | 49 | 29 | 27 | 15 |
| 22..... | 27 | 17 | 24 | 41 | 48 | 65 | 69 | 68 | 41 | 37 | 25 | 22 |
| 23..... | 28 | 35 | 24 | 42 | 48 | 64 | 57 | 57 | 40 | 34 | 33 | 19 |
| 24..... | 34 | 30 | 25 | 47 | 51 | 62 | 59 | 62 | 45 | 30 | 37 | 16 |
| 25..... | 29 | 28 | 34 | 48 | 61 | 69 | 61 | 61 | 55 | 33 | 43 | 15 |
| 26..... | 24 | 37 | 26 | 50 | 60 | 64 | 66 | 61 | 54 | 42 | 57 | 29 |
| 27..... | 25 | 42 | 26 | 50 | 56 | 64 | 67 | 54 | 50 | 48 | 14 | 30 |
| 28..... | 27 | 30 | 35 | 50 | 55 | 60 | 70 | 56 | 50 | 58 | 8 | 30 |
| 29..... | 28 | 26 | 40 | 57 | 51 | 60 | 70 | 60 | 48 | 59 | 8 | 37 |
| 30..... | 37 | ..... | 40 | 58 | 50 | 61 | 69 | 61 | 46 | 40 | 6 | 40 |
| 31..... | 36 | ..... | 41 | ..... | 50 | ..... | 69 | 63 | ..... | 37 | ..... | 41 |
| Means | 21.7 | 20.6 | 25.2 | 44.6 | 56.5 | 60.1 | 65.0 | 65.8 | 53.9 | 43.0 | 30.8 | 27.5 |

Year 1896: 42.9.

MEAN DAILY TEMPERATURE, 1896.

| DATE. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
|------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|
| 1..... | 20 | 34 | 24 | 44 | 66 | 54 | 78 | 74 | 66 | 54 | 46 | 16 |
| 2..... | 24 | 33 | 21 | 25 | 61 | 56 | 80 | 70 | 72 | 54 | 60 | 22 |
| 3..... | 0 | 31 | 26 | 34 | 66 | 56 | 77 | 77 | 63 | 56 | 52 | 26 |
| 4..... | -2 | 30 | 27 | 33 | 62 | 66 | 70 | 82 | 60 | 54 | 49 | 28 |
| 5..... | 4 | 28 | 31 | 43 | 62 | 74 | 66 | 84 | 60 | 58 | 34 | 41 |
| 6..... | 19 | 30 | 36 | 41 | 68 | 78 | 66 | 79 | 56 | 50 | 36 | 36 |
| 7..... | 29 | 26 | 28 | 32 | 74 | 76 | 64 | 77 | 64 | 42 | 34 | 36 |
| 8..... | 28 | 26 | 30 | 36 | 76 | 70 | 67 | 87 | 68 | 43 | 28 | 38 |
| 9..... | 30 | 26 | 32 | 34 | 79 | 57 | 68 | 83 | 76 | 50 | 30 | 39 |
| 10..... | 34 | 30 | 31 | 48 | 79 | 57 | 74 | 86 | 76 | 56 | 42 | 43 |
| 11..... | 34 | 24 | 20 | 62 | 75 | 62 | 78 | 81 | 60 | 56 | 38 | 42 |
| 12..... | 18 | 22 | 10 | 70 | 74 | 61 | 80 | 73 | 64 | 52 | 28 | 49 |
| 13..... | 19 | 22 | 14 | 64 | 69 | 62 | 81 | 72 | 68 | 54 | 24 | 39 |
| 14..... | 22 | 28 | 20 | 62 | 64 | 72 | 80 | 78 | 66 | 56 | 41 | 36 |
| 15..... | 28 | 28 | 24 | 69 | 64 | 65 | 70 | 76 | 62 | 58 | 52 | 34 |
| 16..... | 32 | 16 | 30 | 74 | 60 | 62 | 60 | 72 | 66 | 46 | 60 | 36 |
| 17..... | 36 | 15 | 33 | 65 | 66 | 66 | 67 | 64 | 62 | 40 | 54 | 36 |
| 18..... | 33 | 19 | 34 | 74 | 66 | 70 | 66 | 65 | 58 | 38 | 48 | 30 |
| 19..... | 26 | 3 | 30 | 60 | 52 | 76 | 68 | 62 | 50 | 38 | 30 | 24 |
| 20..... | 34 | -1 | 28 | 60 | 55 | 74 | 76 | 68 | 52 | 36 | 32 | 26 |
| 21..... | 31 | 8 | 42 | 51 | 68 | 72 | 74 | 71 | 58 | 36 | 32 | 20 |
| 22..... | 28 | 28 | 32 | 43 | 58 | 70 | 77 | 76 | 48 | 44 | 34 | 27 |
| 23..... | 32 | 38 | 26 | 50 | 54 | 66 | 64 | 66 | 50 | 42 | 42 | 24 |
| 24..... | 36 | 34 | 34 | 60 | 68 | 66 | 62 | 66 | 58 | 37 | 44 | 21 |
| 25..... | 32 | 34 | 46 | 54 | 71 | 78 | 70 | 72 | 63 | 44 | 52 | 23 |
| 26..... | 26 | 42 | 38 | 59 | 68 | 68 | 78 | 66 | 58 | 54 | 60 | 32 |
| 27..... | 32 | 50 | 32 | 56 | 64 | 72 | 76 | 60 | 52 | 59 | 36 | 34 |
| 28..... | 30 | 38 | 46 | 65 | 60 | 66 | 76 | 62 | 52 | 66 | 12 | 37 |
| 29..... | 38 | 28 | 48 | 66 | 62 | 64 | 81 | 70 | 52 | 65 | 13 | 40 |
| 30..... | 44 | ..... | 46 | 63 | 63 | 74 | 76 | 71 | 56 | 52 | 10 | 44 |
| 31..... | 40 | ..... | 50 | ..... | 54 | ..... | 71 | 66 | ..... | 43 | ..... | 46 |
| Means..... | 27.0 | 26.6 | 31.3 | 53.4 | 65.4 | 67.0 | 72.3 | 72.8 | 60.5 | 49.5 | 38.4 | 33.0 |

Year 1896: 49.8.

DAILY PRECIPITATION, 1896.

| DATE. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. |
|-----------|----------|-----------|--------|--------|-------|-------|-------|---------|------------|----------|-----------|-----------|
| 1..... | .00 | .01 | .27 | Trace | Trace | .00 | .00 | .16 | .00 | .00 | .00 | .00 |
| 2..... | .04 | Trace | .00 | Trace | .14 | .00 | .00 | .00 | .00 | .00 | .05 | Trace |
| 3..... | Trace | 1.52 | .00 | .00 | .00 | .33 | .06 | .00 | .17 | .00 | .23 | .00 |
| 4..... | .00 | .15 | .00 | .00 | .00 | .00 | .00 | .00 | Trace | .00 | .20 | .06 |
| 5..... | .06 | .00 | .02 | .00 | .00 | Trace | .00 | .00 | .22 | .00 | .57 | .01 |
| 6..... | .10 | .00 | .12 | .00 | .00 | .00 | .00 | 1.22 | .00 | .00 | .00 | Trace |
| 7..... | .00 | .00 | Trace | .00 | .00 | .52 | .00 | .02 | .00 | .00 | Trace | Trace |
| 8..... | Trace | Trace | .00 | .00 | .00 | .40 | .00 | Trace | .00 | .00 | 0.02 | Trace |
| 9..... | .00 | Trace | Trace | .20 | .00 | Trace | .00 | .00 | .03 | .00 | Trace | .00 |
| 10..... | .00 | .01 | Trace | .13 | .00 | .02 | .00 | .00 | .00 | .00 | .10 | .00 |
| 11..... | .00 | .00 | .30 | Trace | .00 | .00 | .00 | Trace | .11 | .00 | Trace | .00 |
| 12..... | .00 | .85 | Trace | .00 | .00 | .38 | .00 | 1.22 | .37 | .00 | .00 | .00 |
| 13..... | .00 | .60 | .00 | .15 | .00 | .02 | .00 | .00 | .95 | .00 | .00 | Trace |
| 14..... | .00 | .00 | .00 | .07 | .03 | .00 | .10 | Trace | 2.42 | .00 | .00 | Trace |
| 15..... | Trace | .02 | .15 | .00 | .00 | .20 | .00 | Trace | Trace | .00 | .00 | Trace |
| 16..... | .00 | .03 | Trace | .00 | .01 | .00 | .00 | .04 | Trace | .00 | .00 | .00 |
| 17..... | Trace | .06 | .00 | .00 | .52 | .00 | .00 | .00 | .00 | .92 | .00 | Trace |
| 18..... | .08 | .17 | .05 | .00 | .26 | .00 | .07 | .00 | .59 | .00 | .04 | .04 |
| 19..... | .01 | .03 | .09 | .10 | .55 | .44 | 0.67 | .00 | .04 | .02 | .00 | Trace |
| 20..... | .00 | .00 | .00 | 1.13 | .00 | .39 | Trace | .00 | .00 | .00 | .00 | Trace |
| 21..... | .00 | .00 | .00 | .05 | .33 | Trace | .00 | .00 | .00 | .00 | .38 | .00 |
| 22..... | .01 | Trace | Trace | .00 | .00 | .00 | .00 | 0.86 | Trace | .00 | .00 | .10 |
| 23..... | .58 | .03 | .00 | .49 | .00 | .04 | .43 | Trace | .00 | .00 | .15 | .04 |
| 24..... | .03 | .00 | .00 | .29 | .00 | Trace | .44 | .00 | .00 | .00 | .03 | Trace |
| 25..... | .01 | Trace | Trace | .00 | 1.47 | .02 | .00 | .00 | .03 | .00 | .04 | .00 |
| 26..... | Trace | .00 | Trace | .11 | .00 | .00 | 1.19 | .00 | Trace | .00 | .35 | Trace |
| 27..... | .00 | .00 | .00 | .07 | .35 | .00 | .65 | .00 | .01 | .00 | Trace | .00 |
| 28..... | .00 | .00 | .19 | .00 | Trace | .06 | .00 | .00 | .00 | .28 | .00 | Trace |
| 29..... | .00 | .00 | .07 | Trace | .00 | .00 | Trace | .00 | .46 | .04 | .00 | Trace |
| 30..... | .00 | .00 | .00 | Trace | .50 | .00 | .00 | .00 | 1.27 | .11 | .00 | Trace |
| 31..... | .20 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .00 | .01 | .00 | .00 |
| Sums..... | 1.12 | 3.48 | 1.26 | 2.79 | 4.16 | 2.82 | 3.61 | 3.52 | 6.70 | 1.36 | 2.16 | .16 |

Year 1896: 33.14 inches.

From the table on the prior page and accompanying diagram, on which are shown the meteorological conditions over the basin of the upper lakes, we obtain important facts affecting the level of Lake Michigan. We see that, with a temperature of 45.7 degrees Fahrenheit and 29.28 Bar., an average annual rainfall of 32.53 inches over the catchment area of Lake Michigan gives an annual elevation of that lake at about 15 inches above datum. The conditions of one year appear to be felt in the elevation of the lake during that following, if there be no material departure from the normal. We see the low rainfall of 1874, $3\frac{9}{10}$ inches below the normal, and $2\frac{9}{10}$ inches less than that for 1873, and an increase of temperature and a barometer higher than the normal, were conditions all tending—except high barometer—to decrease the elevation of the lake in the following year; and that decrease took place, a fall of $2\frac{5}{10}$ inches, notwithstanding that during that year 1875 an increase of $3\frac{1}{2}$ inches of rainfall took place, $5\frac{3}{10}$ inches above the normal—and the temperature fell $4\frac{3}{10}$ degrees below 1874, or $3\frac{7}{10}$ degrees below the normal, while the barometer was favorable to increased evaporation from the lake surface; but, while against these conditions favorable to increase of elevation of lake in 1875—the lake actually went down because of the influence of the conditions of 1874—we see the favorable conditions of 1875 bring the lake up in the following year above the normal by an increase in that year of $13\frac{3}{10}$ inches, although during that same year the rainfall was over four inches less than in 1875, and the temperature, made more effective by a lower barometer, was over three degrees higher than in 1875—all conditions in 1876 being thus actively hostile to an increase in the level of Lake Michigan, yet, because of the conditions of 1875, it did increase. Unless we have some heavy rains over the lake basin before the frost is out of the ground, so that it will pass directly to the lake, there is nothing to induce us to hope for any improvement of the lake level; but, on the contrary, as the precipitation for 1896 is below the normal, the mean water for this coming year must be still lower than that for 1896, but the conditions shown during January of 1897 give promise of a better result.

TRACK ELEVATION.

MR. T. P. McDONOUGH, Assistant Engineer in charge.

During the year the Lake Shore & Michigan Southern Railway Company and the Chicago, Rock Island & Pacific Railway Company, acting under an ordinance passed July 9, 1894, have elevated jointly six tracks a distance of two miles, or from Forty-fifth street to Fifty-ninth street. Subways were constructed at each of the following streets:

| | | |
|--|-----------------------------|------------|
| Forty-seventh street..... | 66 ft. wide, clear headroom | 13.5 feet. |
| Fifty-first street | 66 " " " | 12 " |
| Fifty-third street | 66 " " " | 12 " |
| Fifty-fifth street boulevard.. | 200 " " " | 13.5 " |
| Fifty-seventh street | 66 " " " | 12 " |
| Fifty-eighth street, or Cloud court | 66 " " " | 12 " |
| Fifty-ninth street..... | 66 " " " | 12 " |

In July, 1896, an ordinance was introduced in the City Council amending the above ordinance so as to extend track elevation on the Lake Shore & Michigan Southern Railway as far south as St. Lawrence avenue. This amendatory ordinance provides for elevating the switching yard of the Lake Shore & Michigan Southern Railway Company at Sixty-third street, and for the construction of a subway at Sixty-seventh street and at South Park avenue; each to have a clear head-room of 12½ feet.

The Chicago & North-Western Railway Company was the next road to perform active work on track elevation during the year. An ordinance was passed March 30th, providing for elevation of their tracks on the Wisconsin Division between Clybourn Junction and a point in Mayfair Yard near North Forty-third court, a distance of about 4.5 miles. Subways were provided for at each of the following streets:

| | | |
|--|-----------------------------|----------|
| North Wood street | 66 ft. wide, clear headroom | 12 feet. |
| Webster avenue | 66 " " " | 12 " |
| North Robey street..... | 66 " " " | 13.5 " |
| West Fullerton avenue | 73 " " " | 13.5 " |
| North Leavitt street..... | 66 " " " | 12 " |
| North Western avenue..... | 66 " " " | 13.5 " |
| North Campbell avenue | 66 " " " | 12 " |
| Footway in Schubert avenue | 10 " " " | 8 " |
| North Rockwell st. and Hoff- man avenue | 66 " " " | 12 " |

| | | |
|-------------------------------|-----------------------------|------------|
| West Diversey avenue | 66 ft. wide, clear headroom | 13.5 feet. |
| Washtenaw avenue | 66 " " " | 12 " |
| North California avenue..... | 66 " " " | 12 " |
| West Wellington street..... | 66 " " " | 12 " |
| North Sacramento avenue ... | 66 " " " | 12 " |
| North Albany avenue..... | 80 " " " | 12 " |
| West Belmont avenue..... | 66 " " " | 13.5 " |
| North Kedzie avenue | 66 " " " | 13.5 " |
| Kimball avenue | 66 " " " | 12 " |
| West Addison street | 66 " " " | 12 " |
| North Fortieth avenue | 66 " " " | 13.5 " |
| North Forty-first court | 80 " " " | 12 " |
| Irving Park boulevard..... | 100 " " " | 13.5 " |
| North Forty-second avenue.. | 80 " " " | 12 " |
| North Forty-second court.... | 80 " " " | 12 " |
| North Forty-third court..... | 66 " " " | 12 " |
| North Forty-fourth avenue .. | 66 " " " | 10 " |

In all twenty-five subways. And on the Milwaukee line of the Chicago & North-Western Railway, and extending from Clybourn Junction to Rose Hill, a distance of about 4.2 miles, and providing for the construction of a subway at each of the following streets :

| | | |
|----------------------------|-----------------------------|------------|
| Diversey avenue | 66 ft. wide, clear headroom | 13.5 feet. |
| Wellington street..... | 66 " " " | 12 " |
| Noble avenue..... | 66 " " " | 12 " |
| Belmont avenue | 66 " " " | 13.5 " |
| Melrose street | 66 " " " | 10 " |
| School street | 66 " " " | 12 " |
| Roscoe street | 66 " " " | 12 " |
| Cornelia street | 66 " " " | 12 " |
| Lincoln and Addison comb'd | 66 " " " | 13.5 " |
| Grace street | 66 " " " | 12 " |
| Irving Park boulevard..... | 100 " " " | 12 " |
| Berteau avenue..... | 80 " " " | 12 " |
| Montrose avenue | 80 " " " | 12 " |
| Sunnyside avenue | 80 " " " | 10 " |
| Wilson avenue..... | 80 " " " | 10 " |
| Leland avenue..... | 80 " " " | 10 " |
| Lawrence avenue..... | 80 " " " | 12 " |
| Winnemac avenue..... | 80 " " " | 12 " |
| Foster avenue | 66 " " " | 12 " |
| Balmoral avenue | 66 " " " | 12 " |

In all nineteen. Of these, there were thirteen constructed during the year, extending from Diversey avenue to and including Berteau avenue, a distance of about two and one-half miles, which were constructed in exactly forty-five working days, which is the quickest

work done thus far in track elevation in this City. There remains a distance of about one and three-fourths miles to be elevated and six more subways to be constructed to complete the work of track elevation on this division.

No work has been done on the Wisconsin line of the Wisconsin division between Clybourn Junction and Mayfair.

On June 11, 1896, an ordinance was passed which provided for the elevation of the tracks in Rockwell street, viz.: Chicago & North-Western Railway and Pittsburgh, Cincinnati, Chicago & St. Louis Railway companies, beginning at Western avenue and extending south to about the center of Ogden avenue, a distance of about two miles, and provides for a subway at each of the following streets:

| | | | |
|-----------------------------|-----------------------------|------|-------|
| Fulton street | 66 ft. wide, clear headroom | 12 | feet. |
| West Lake street | 80 " " " | 12.5 | " |
| Park avenue..... | 60 " " " | 12 | " |
| Washington boulevard | 66 " " " | 13.5 | " |
| Warren avenue | 66 " " " | 12 | " |
| West Madison street..... | 73 " " " | 12.5 | " |
| West Monroe street..... | 66 " " " | 12 | " |
| Wilcox avenue..... | 66 " " " | 12 | " |
| West Adams street | 66 " " " | 12 | " |
| Jackson boulevard..... | 66 " " " | 13.5 | " |
| West Congress street | 66 " " " | 12 | " |
| West Van Buren street | 66 " " " | 12.5 | " |
| West Harrison street | 66 " " " | 12.5 | " |
| Flournoy street..... | 66 " " " | 12 | " |
| Lexington street..... | 66 " " " | 12 | " |
| West Polk street | 66 " " " | 12 | " |
| Harvard street | 66 " " " | 12 | " |
| West Taylor street | 66 " " " | 12.5 | " |
| West Twelfth street | 100 " " " | 12.5 | " |

In all nineteen subways. Actual work under foregoing ordinance has not been commenced.

In conjunction with the above work of track elevation, the Chicago & Northern Pacific R. R. Company is to elevate about three-fourths of a mile of track and to provide for subways at West Twelfth street and Washtenaw avenue, and this is embodied in the ordinance passed July 11, 1896, known as the Rockwell street ordinance.

On June 27th, 1896, an ordinance was passed which provided for the elevation of the tracks of the Pittsburgh, Ft. Wayne & Chicago

Railway Company in Stewart avenue from Fifty-fifth street boulevard south to State street, a distance of about two miles; this ordinance provides for a subway at each of the following streets:

| | | |
|--------------------------------|------------------------------|------------|
| Fifty-fifth street boulevard.. | 200 ft. wide, clear headroom | 13.5 feet. |
| Fifty-seventh street | 66 " " " | 12 " |
| Fifty-eighth st. passageway. | 25 " " " | 12 " |
| Fifty-ninth street | 66 " " " | 13.5 " |
| Sixtieth street | 60 " " " | 12 " |
| Maple street..... | 66 " " " | 12 " |
| Sixty-first street..... | 66 " " " | 13.5 " |
| Chestnut street | 66 " " " | 12 " |
| Princeton boulevard..... | 66 " " " | 12 " |
| Sixty-second passageway.... | 25 " " " | 11 " |
| Wentworth avenue..... | 80 " " " | 13.5 " |
| Sixty-third street..... | 66 " " " | 13.5 " |
| State street..... | 60 " " " | 13.5 " |

In consideration of allowing the tracks to remain in Stewart avenue, the Pittsburgh, Ft. Wayne & Chicago Railway Company is to procure and dedicate for street purposes, a street thirty-three feet wide next west of and adjoining the west line of Stewart avenue, north and south of Maple avenue, and extending from the south line of Fifty-fifth street to the north line of Maple avenue; thence to continue southwardly on a curve to a point where the same shall intersect the west line of Stewart avenue. The railway company is now procuring and purchasing the ground necessary for the new Stewart avenue, but no active work has been done as yet on track elevation or towards making the proposed street.

In July, 1896, an ordinance was introduced in the City Council amending the above ordinance so as to extend track elevation on the Pittsburgh, Ft. Wayne & Chicago Railway from State street south to St. Lawrence avenue; this amendatory ordinance provides for the construction of a subway at Sixty-seventh street and South Park avenue, each to have a clear headroom of twelve and one-half feet.

In July, 1896, an ordinance was introduced in the City Council to provide for the elevation of the St. Charles Air Line and all the other adjacent tracks crossing South Clark street immediately north of Sixteenth street. Several plans have been prepared for the elevation of this line. The one most favorably considered eliminates the railroad grade crossings of the Lake Shore & Michigan Southern Railway, the Chicago, Rock Island & Pacific Railway with the Chicago & Western Indiana Railway and the Atchison, Topeka &

Santa Fe Railway, which plan requires the depression of the two last named railroads and the elevation of the first two above named railroads.

All the plans proposed to elevate the Air Line Railroad sufficiently to provide for subways at all of the streets and alleys, running north and south from Clark street east to Indiana avenue without any depression.

An ordinance has been prepared by the Union Stock Yard & Transit Company to enable the Lake Shore & Michigan Southern Railway Company and the Chicago, Rock Island & Pacific Railway Company, to prosecute the work of elevating their tracks to conform with the ordinance passed July 9, 1894, by permitting the depression of the tracks of the Union Stock Yard & Transit Company under the tracks of the Lake Shore & Michigan Southern Railway and the Chicago, Rock Island & Pacific Railway in Fortieth street, the east depression to begin at the west line of Dearborn street and the west depression to end at east line of Wentworth avenue. The ordinance also provides for elevating the "Y" connections to the Lake Shore & Michigan Southern and Chicago, Rock Island & Pacific Railways. Plans have been prepared for the elevation of the Union Stock Yard & Transit Company from Halsted street east to the Illinois Central Railroad, a distance of about four miles; the portion of the line east of the Lake Shore & Michigan Southern Railway to be carried on an open iron structure, thus providing subways for all streets and alleys from State street to Lake avenue, both inclusive; and the portion of the line west of the Lake Shore & Michigan Southern Railway to be constructed on a similar plan as now being used on the Lake Shore & Michigan Southern Railway.

Plans have been prepared for the elevation of the Pittsburgh, Ft. Wayne & Chicago Railway from Fifty-fifth street boulevard northwardly to Eighteenth street, a distance of nearly four miles, and provides for the construction of about twenty-five subways.

Plans have been prepared for the elevation of the Chicago & Western Indiana Railway from Sixty-ninth street northwardly to Eighteenth street viaduct, a distance of about six miles, and provides for the construction of about forty subways.

Plans have been prepared for the elevation of the tracks of the Chicago, Burlington & Quincy Railroad Company, from the railroad crossings at Western avenue westward to West Forty-sixth street (City limits), a distance of about two and one-half miles, and the same provides for the construction of about fourteen subways.



KENSINGTON SEWAGE PUMPING STATION

Plans have been prepared for the elevation of the tracks of the Chicago & North-Western Railway, from Clybourn Junction southwardly to Chicago avenue viaduct, a distance of about one and three-quarters miles, and provides for the construction of fifteen subways.

Surveys and profiles have been made for proposed elevation of the Chicago, Evanston & Lake Superior branch of the Chicago, Milwaukee & St. Paul Railway, also the Council Bluffs division of said railway along Bloomingdale road from Pacific Junction to junction of Evanston branch.

DIVISION OF ARCHITECTURE.

MR. R. BRUCE WATSON, City Architect.

The following buildings have been designed and supervised by this Division during the year:

FIRE DEPARTMENT.

MARYLAND AVENUE FIRE ENGINE HOUSE, No. 63.

The Maryland avenue fire engine house, referred to in the last annual report, has been completed and occupied since March 1, 1896. Dimensions of building are 26 feet by 82 feet. The front of first story is built of a selected blue Bedford stone, and richly carved in detail. The second story is of buff Roman brick with copper bay. The interior throughout is finished in hardwood. The cost of building was \$6,797. (See illustration.)

NINETY-FIFTH STREET ENGINE HOUSE, No. 82.

On December 30th, contract was let for a two-story fire engine house located on Ninety-fifth street, at the head of Cottage Grove avenue. Work was commenced January 18, 1896, and is to be completed and ready for occupancy March 18, 1897. The building will be of frame construction, back plastered throughout, with galvanized bay and cornice on front. Interior throughout will be of hardwood, and will cost complete \$2,800.

ENGINE HOUSE, TRUCK 2.

Corner Washington and Clinton Streets.

Contracts were let November 11, 1896, for new stone sidewalk built on iron beams and columns. Said work was completed November 30, 1896, and cost complete \$707.

ENGINE HOUSE, No. 83.

Plans are now being made for fire engine house to be located on South place, between Magnolia avenue and Evanston avenue, to be constructed of frame, with copper bays and cornices on front. Interior throughout to be of hardwood, and will cost complete \$3,000.

DEPARTMENT OF SEWERS.

Contract for the Kensington Sewerage pumping station, located on Indiana avenue, between 116th and 117th streets, was let on April 25, 1896, and work was commenced immediately thereafter. The building is completed and in working order at the present date. The dimensions of same are 30 feet by 75 feet; engine room is 28 feet by 28 feet; boiler room is 21 feet 6 inches by 28 feet, with smoke-stack 3 feet inside diameter and 85 feet high; coal room is 14 feet by 21 feet.

The front is built of pressed brick with highly ornamented design in terra cotta, sides and rear are of common brick. Interior of engine room is of pressed brick with tile roof constructed on steel trusses. The cost complete was \$7,200. (See illustration.)

CITY REPAIR SHOPS.

Having to vacate the present site of our City repair shops, plans and specifications were drawn and contracts let for new buildings, located on Ashland avenue near Twenty-second street. Work was commenced November 17, 1896, and will be completed and ready for occupancy February 15, 1897. Cost of building, complete, \$35,000. The shops are built of brick with steel columns and steel beams for floor supports; gravel roof; oak and maple floors; pressed brick fronts with copper cornices; heated by steam; lighted by electricity. Outside dimensions of machine repair shop are 80 feet by 125 feet; machine shop proper is 76 feet by 51 feet; blacksmith shop is 76 feet by 30 feet; store rooms 21 feet by 25 feet, and 11 feet by 18 feet; oil room is 8 feet by 25 feet; engine room is 16 feet by 30 feet; lavatory, 18 feet by 19 feet. There is also separate office and tool room.

The second story is divided into pattern storage room, pattern making room and lumber store room. In rear of machine shop are built the storage sheds, which are covered with heavy corrugated iron inside and outside, including roof. Said sheds are used for the storage of castings, fire plugs, etc.; also storage for two steam rollers and coal wagons.



NEW CITY REPAIR SHOPS

The police repair shop is 75 feet by 150 feet, outside dimensions. These buildings are so arranged that the shipment of machinery, etc., can be received or delivered by means of water or rail. (See illustration.)

HOUSE OF CORRECTION.

Sketches have been prepared for Boys' Reformatory in connection with the John Worthy Manual Training School. Said building is to be built of common brick with stone trimmings. Outside dimensions 70 feet by 264 feet, and will contain 150 cells and dormitory for 48 boys, making in all accommodation for 198 inmates. This building will be of the best modern construction, especial attention being given to the heating, ventilating and sanitary arrangements. Cells will be built of steel construction and to cantilever for balconies, doing away with all posts, making a clean floor space. The interior partitions are to be of hollow tile. The entire building to be plastered in Portland cement with all corners rounded, leaving no spaces to catch dust or dirt, and doing away with as much woodwork as possible. The entire building is to be of fire-proof construction. All floors are to be of cement and so graded as to flush itself dry. Above dormitory will be a chapel, 46 feet by 66 feet. Estimated cost, \$50,000.

HEALTH DEPARTMENT.

WENTWORTH AVENUE BATH HOUSE.

Contracts were let for a bath house located on Wentworth avenue between Thirty-eighth and Thirty-ninth streets. Dimensions of building are as follows: The front part of building, which consists of waiting rooms and office, is 30 feet by 49 feet 6 inches; wing part, which is the bath proper, is 26 feet by 70 feet, and contains thirty-one separate dressing rooms and shower baths, one tub bath, and all necessary toilet arrangements annexed.

The basement is divided into a boiler room, laundry, and soup kitchens. The front part of the building is so arranged that, at any time the Department sees fit, another wing can be added similar to the one now built, which will give a separate division for males and females, with separate entrances, waiting rooms, etc. This double wing arrangement will give sixty-two shower baths with dressing rooms and two tub baths.

Work on building was commenced September 24, 1896, and will be completed on or before February 15, 1897. The cost complete will be \$13,500.

The front is built of pressed brick with ornamental terra cotta entrances. The rest of the building is built of common brick. Inside throughout is plastered with cement plaster. Floor of bath proper is of cement laid on hollow tile arches supported by steel beams and columns. The interior is finished in oak, using as little wood as possible in bath proper. The dividing partitions of all stalls in bath proper are of slate, with all necessary nickel-plated attachments.

CITY ISOLATION HOSPITAL.

MR. D. E. WAID, Superintendent.

The history of the Hospital for Contagious Diseases, formerly intended for smallpox, was given in the preceding annual report. The institution occupies ten acres of ground, located at Thirty-fourth street and Lawndale avenue. It was completed, including all eight buildings, ready for reception of patients, December 1, 1896, and cost complete, including heating, cooking, laundry and disinfecting apparatus, the fences and grading of grounds, \$112,000. The buildings are brick, with steel beam and tile arch floors, tile roofs and polished oak interior finish. They are fire-proof and embody the most modern ideas for the safety, comfort and treatment of patients. A central plant supplies heat and electric light to all the buildings. The wards have a special ventilating system with automatic temperature control. The steam cooking and steam laundry apparatus is sufficient to care for five hundred patients and the general executive capacity of the institution corresponds.

Appreciating thoroughly your hearty co-operation during the past year in the management of this Bureau, as well as the efficient aid of my assistants, I respectfully submit the foregoing report.

Very respectfully yours,

LEWIS B. JACKSON,

City Engineer.

REPORT OF THE
Bureau of Water Rates

CITY OF CHICAGO

WATER OFFICE REPORT

HON. JOSEPH DOWNEY,

Commissioner of Public Works.

DEAR SIR: In conformity with the usual custom the Annual Report of the Bureau of Water Rate Collections for the year ending December 31, 1896, is herewith respectfully submitted.

Detailed statistics of the various sub-branches, embracing the Collection, Assessor's, Permit, Meter Clerical, Meter Mechanical, Shut Off and Inspection Departments, are included.

The unparalleled depression in business during the year has largely affected the revenue and collections of the Bureau; notwithstanding this, I regard the year's work as highly satisfactory.

While the increase in revenue as shown by comparison with the report of 1895 is only \$23,585.75, in reality the actual increase will be about \$135,000.00; in explanation of which I will say that a vast amount of matter was removed from the records by annual inspections and special examinations, the same having accumulated for two and three years and discovered in transferring the old to a new set of ward books in May last.

COLLECTIONS.

The total net collections from all sources for the year 1896 amounted to \$3,226,559.73, received as follows:

| | |
|-----------------------------------|----------------|
| Assessed Rates | \$2,103,016 54 |
| Meter Rates | 1,023,285 09 |
| Permits | 43,767 90 |
| Plumbers' Licenses | 5,510 00 |
| Assessor's Miscellaneous | 26,197 75 |
| Meter Mechanical Department | 24,782 45 |
| <hr/> | |
| Total | \$3,226,559 73 |
| Total for 1895 | 3,215,137 10 |
| <hr/> | |
| Increase over 1895 | \$ 11,422 63 |

The assessed rates increased \$35,155.19 and the meter rates \$19,081.61 over 1895, though these were largely offset by the falling off in receipts from permits, plumbers' licenses, miscellaneous and meter mechanical, the general apathy in business affecting the receipts from all these sources except those from plumbers' licenses, which were transferred to the City Collector's Office by an ordinance which went into effect May 1st last; all fees for plumbers' licenses received subsequent to this date being paid to the City Collector.

The total increase in collections for the years 1895 and 1896, or the term of the present administration, over 1893 and 1894, the previous term, is \$593,609.56. This, in my estimation, all conditions considered, should be regarded as an excellent showing.

EXPENSES.

The entire expense of operating the Bureau for the year 1896 was \$285,831.95 as against \$309,273.30 for 1895—a net saving of \$23,441.35. In this connection the following statement showing the gradual reduction of the percentage of expenditures to collections during the last six years will be found interesting; the year 1896 furnishing the largest receipts, least expense, and smallest percentage of any during the six years.

| Year. | Receipts. | Expenses. | Per cent. |
|------------|----------------|--------------|-------------------|
| 1891..... | \$2,331,286 20 | \$303,879 86 | 13 |
| 1892..... | 2,592,111 67 | 336,956 79 | 13 |
| 1893 | 2,837,827 35 | 294,968 60 | 10 $\frac{5}{10}$ |
| 1894..... | 3,010,259 92 | 287,306 92 | 9 $\frac{5}{10}$ |
| 1895..... | 3,215,137 10 | 309,273 30 | 9 $\frac{5}{10}$ |
| 1896..... | 3,226,559 73 | 285,831 95 | 8 $\frac{8}{10}$ |

It will be remembered that the year 1895 contained four months for which the present administration is not responsible, being the closing months of the previous administration. The same ratio of expense to receipts for the remaining eight months would in all probability have reduced the expense of 1895 to nine per cent. A continuance of present conditions will no doubt reduce the percentage of 1897 proportionally.

UNCOLLECTED.

The amount of uncollected taxes due the Bureau is \$484,001.08; of this \$70,106.74 is due for water used and paid for by meter measurement, composed mostly of the monthly tax which will be paid

within the coming month. The remainder, \$413,894.34, with the exception of perhaps twenty-five per cent., the amount which usually remains on the books each year, though the water supply is shut off, will be collected in the usual manner by means of the shut-off force by the first of May, 1897.

EXEMPTIONS.

Under the ordinance covering same, water taxes (assessed rates) have been abated on account of municipal and public buildings to the amount of \$33,888.76, and \$29,154.88 on account of religious, charitable and educational institutions.

November 16, 1896, an ordinance was passed granting water free of expense to be used in connection with the parks and boulevards under the control of the South Park Commissioners in consideration of their assuming the control and expense of maintaining Jackson street boulevard, thus relieving them of the payment of \$5,000.00, per annum, to the City. Under this agreement the last of the park systems is exempt from the payment of water taxes, the West Side parks being exempt for some time by reason of assuming the care of the small City parks, and Lincoln Park using City water for drinking purposes only, and which is furnished free—water for all other purposes is pumped by their own engines and at their own expense.

REARRANGEMENT OF OFFICE.

No improvements will be suggested except the enlargement and rearrangement of the office as shown in the drawings I presented you recently. This will cost according to reliable estimates about \$10,000.00, and I desire to urge upon you the necessity of securing for this purpose the necessary appropriation, in order that the change may be made during the slack season this summer, as it is becoming utterly impossible to transact the business of the department with any degree of comfort or satisfaction either to the employees or to the public in the present crowded quarters.

CIVIL SERVICE LAW.

Too much praise cannot be bestowed upon the civil service law and its rigid and successful enforcement by His Honor Mayor Swift, and Commissioner Downey. Its beneficial influence upon this the

largest clerical department in the City government is most noticeable in various ways. Its most marked effects are perhaps that a better grade of efficiency is created among the employees by relieving them from the fear of political changes; also the feeling of security with which the law surrounds those who are trustworthy and competent.

Honest effort for improvement and promotion is stimulated by reason of the knowledge that reward is procured by merit alone and without regard to the influences heretofore in vogue under the old system. With the assistance of the civil service law, and under the direction of the present able Commissioner of Public Works, I firmly believe this Bureau is in better condition with regard to business management, economy in expenditures, discipline among the employees, absolute honesty and fidelity to the interests of the City, and fair and equitable treatment to all classes of taxpayers without reference to race, creed or politics, than during any previous period in the history of the Bureau, and should the present conditions prevail for another year will challenge comparison with any similar institution, public or private.

I should consider this report incomplete if I failed to testify to the influence to the civil service law in accomplishing the results.

ACCOUNTING DEPARTMENT.

In addition to many improvements of minor importance in the Accounting Department on the first day of May, 1896, an entire new set of ward books, eighty-two in number, was opened; the old ones in use for the previous two years being completed. Arrangements were made and the system altered so that the entries of payments on these books could be balanced with the receipts of the cashier and with the returns of the assessors. At the end of the term, and for the first time I believe in the history of the Bureau, the total figures of the assessors', Cashier's and ward books were compared, and a balance secured, which resulted in revealing irregularities and shortages in several wards. Several dismissals from the force followed, but the shortages were in every instance collected, so that the City suffered the loss of not a single cent.

REFUNDS.

Heretofore the manner of allowing refunds for duplicate or overpayments, which no system yet suggested or devised seems to prevent, has been, after the claim was properly recorded and verified, to

voucher the same through the book-keeper of the Department of Public Works, and the Comptroller's Office, entailing a delay of a month or more in payment and no end of complaint from the taxpayers. A change was made last May whereby an order was made, similar to that already in use for rebates on erroneous assessments, for the amount of rebate signed by the Superintendent of Water and Commissioner of Public Works, and cashed by the Cashier of the Water Office without delay to the taxpayers as formerly. The orders are delivered to the Comptroller by the City Treasurer, who in turn receives warrants which are retained by him as authority for the payment of cash through this office for the refunds.

COLLECTIONS BY UNITED STATES AND PACIFIC EXPRESS CO.

During the year the Bureau collected through the United States and Pacific Express Company in payment of 64,343 bills a total of \$343,146.81.

The taxpayers' attention is particularly directed to this convenient method of paying water tax bills; this can be done at any of the branch offices of the above company by the additional payment of five cents, or one car-fare.

On the backs of all water bills will be found printed the location of these agencies in every ward and within a short distance of any point in the City.

COMPARISON OF RATES.

The Bureau is constantly in receipt of complaints from taxpayers regarding what is termed the excessive rates charged for water in this City. More especially is this noticeable during these times of depression when a large percentage of our citizens are in straitened circumstances and are unable to comprehend the reason why the City should not furnish water at cheaper rates with such a vast body of water at our doors. In order to show that our charges are not excessive, but, on the contrary, are among the cheapest of any in the country, I desire to quote the figures from a former report, which I find to be substantially correct, showing the rates per annum of the ordinary two-story eight-room house, supplied with a bath

room, closet, wash-basin and kitchen sink, and the use of water for sprinkling lawns and washing windows and sidewalks, in ten of the principal cities :

| | |
|---|---------|
| St. Louis | \$27.00 |
| Kansas City..... | 26.50 |
| Pittsburgh..... | 26.50 |
| Milwaukee..... | 24.25 |
| Boston (sprinkling prohibited unless under meter control).... | 22.00 |
| Brooklyn | 22.00 |
| Cincinnati | 20.25 |
| Philadelphia..... | 18.00 |
| New York (sprinkling or use of hose prohibited) | 13.00 |
| Chicago..... | 13.50 |

In addition to this Cincinnati is the only city where a discount is allowed; on the contrary, in several of these places a penalty is added where the bills are not paid by a given period; whereas a discount of 15 per cent. is given in Chicago when bills are paid promptly.

Meter rates are as follows in the cities hereinbefore mentioned :

| | |
|---|-----------------------------|
| Kansas City | 36 cents per 1,000 gallons. |
| St. Louis | 30 " " " " |
| Omaha..... | 30 " " " " |
| Milwaukee | 20 " " " " |
| Boston..... | 18 $\frac{2}{3}$ " " " " |
| Cincinnati | 15 " " " " |
| New York | 13 $\frac{1}{2}$ " " " " |
| Chicago, 10 cents for the first 165,000 gallons and 8 cents beyond that amount. | |

ASSESSOR'S AND PERMIT DEPARTMENTS.

In January, 1896, the office of Chief Permit Clerk was abolished and the salary of that official saved to the Department. The Permit Department was consolidated with the Assessor's Department and placed under the immediate supervision of the Assessor. As the interests of these two branches of the Bureau are closely allied, the consolidation could have none other than a beneficial effect, as the results have shown.

There were inserted during the year 12,932 ferrules, 11,521 of which were screw and 1,411 driven. 837 retaps were made. A total of 6,059 applications were made for ferrules to water service pipes, exclusive of City contracts and retaps.

The entire amount of permits issued for all sizes of connections for the year was 13,672. \$5,510.00 was collected by this Department for plumbers' licenses for the period from January 1 to April 30; subsequent to which all such fees have been paid to the City Collector, as stated heretofore.

Five thousand five hundred and eighty-six service pipes were laid during the year at a total cost of \$68,092.48, or an average cost per pipe of \$12.18. This shows a slight increase over the cost of the same work in 1895; this is more than accounted for by the advance in the price of lead pipe over that paid in 1895.

Great difficulty and inconvenience has been experienced for several years past by reason of the fact that the Draughting Department has been unable to furnish the location of service pipe connections for shut-off and other purposes, owing to the incomplete condition of the records procured from the annexed districts, such as Hyde Park and Town of Lake. Atlases and plat blocks were in some instances entirely missing and as duplicate copies could not be secured the annoyance and delay to the Bureau can be easily imagined.

A great amount of labor and search among old records of all kinds, as well as by the locating and shut-off men, has been required to overcome this obstacle; and while our Map Department is still far from perfect we are to-day in possession of a complete set of map tracings for every lot and block located within the water district of the City. Plat books containing a permanent record for all pipe connections will in all probability be finished within a year or so.

METER MECHANICAL DEPARTMENT.

January 1, 1896, there were in service, by actual count, 4,949 meters. We placed during the year in new locations 263 meters. We substituted 101 new meters for the same number of old and worthless ones. Total number in service December 31, 1896, is 5,106.

There were in service December 31, 1896, 308 hydraulic elevators. During the year 1896 twenty-eight of these were removed, owing to the change in power from water to electric, or otherwise; leaving still in use 280.

Early in August, owing to the active competition of several meter manufacturers for the trade of the City, considerable contention was created regarding the respective merits of the different

makes of meters in use by the City. The management of the Bureau was charged with favoritism toward certain meters to the exclusion, it was claimed, of others equally as reliable and durable. At my suggestion you appointed an expert committee, composed of mechanical engineers, whose duty it was to make examinations of the various styles of meters and render an opinion as to which was the best adapted to the uses required by the condition of this City. This report delivered to you and published shortly thereafter, and generally considered just and reliable, in effect sustained the attitude of the management of the Bureau regarding the purchase of meters, thus ending the controversy.

At the end of nearly two years' experience as head of this Bureau, after vainly endeavoring to materially increase the meter supply of the City, it is my firm conviction that the present method of forcing consumers to supply themselves with meters at their own expense is a failure, if not unjust to both consumer and the City. Radical measures, in my opinion, should at once be adopted to check the enormous waste of water, each year growing larger, by those at present paying by assessed rates, and the shortage among others not as conveniently located to mains with a good pressure. In my judgment this can be best accomplished through the purchase of all meters by the City itself, and the immediate enforcement of their use by all large consumers. The principal objection will thereby be removed and the City suffer no loss, as has been demonstrated in other cities where the additional expense incurred through the purchase of meters has been more than overcome by the gain in revenue through their use.

INSPECTION DEPARTMENT.

In addition to its other work, as detailed hereafter, the Department made an inspection of every saloon in the City, the locations of which were secured by the aid of the saloon license records in the City Collector's office, resulting in locating 986 saloons for which special charges are made over ordinary stores, and increasing the revenue from this source for 1896, and all subsequent years in which they are in use, \$10,912.46.

The reinspection of Wards 16, 20, 21, 22, 23 and 24 will make an annual increase of \$22,048.00.

Wards 25 and 26 were also inspected in 1896, but the increased assessment will not be brought upon the books until the early part of 1897. We estimate this will result in an increase of about \$20,000.00.

New buildings were inspected in November and December, and properly creditable to 1896, but not entered on Assessor's checks until January, 1897, which will increase the revenue \$14,870.25.

The records of this Department show the number of buildings in the City, December 31, 1896, as follows:

| | |
|----------------------------------|---------|
| Private dwellings | 140,730 |
| Apartment houses | 18,995 |
| Factory buildings | 4,863 |
| Stores and office buildings..... | 36,627 |
| | <hr/> |
| Totals..... | 201,215 |

Following is the number of buildings located in the water district May 1, 1896:

| | |
|--------------------|---------|
| Assessed..... | 182,714 |
| Meter control..... | 6,674 |
| | <hr/> |
| Total..... | 189,388 |

SHUT-OFF DEPARTMENT.

During the year 1896 the Leak, Waste and Shut-Off Department served 5,838 notices of leaks and wastes; distributed and served 119,380 water bills and shut-off notices. We also shut off for delinquent taxes 3,943 connections and investigated 1,425 complaints.

INSPECTION DEPARTMENT.

The following is the report of the work done by Water Inspectors for the year 1896:

All buildings in the Sixteenth, Twentieth, Twenty-first, Twenty-second, Twenty-third, Twenty-fourth, Twenty-fifth and Twenty-sixth Wards were thoroughly re-inspected.

Five hundred and ninety-nine (599) surveys were made for pipe petitions and pipe deposits.

BUILDINGS EXAMINED.

| 1896. | One-Story. | Two-Story. | Three-Story. | Four-Story. | Five-Story. | Six-Story. | Special Examination. | Examination for Vacancies. | New Buildings Examined. | Total per Month. |
|------------------|------------|------------|--------------|-------------|-------------|------------|----------------------|----------------------------|-------------------------|------------------|
| January | 867 | 1,624 | 823 | 241 | 12 | 2 | 305 | 37 | ..... | 3,911 |
| February . . . | 852 | 1,802 | 940 | 127 | 10 | 1 | 295 | 42 | ..... | 4,069 |
| March | 893 | 1,301 | 402 | 111 | 34 | 17 | 410 | 59 | ..... | 3,227 |
| April | 488 | 1,782 | 1,416 | 271 | 24 | 2 | 330 | 63 | ..... | 4,426 |
| May | 884 | 1,567 | 232 | 37 | 2 | 1 | 1,480 | 112 | ..... | 4,315 |
| June | 742 | 1,309 | 202 | 15 | 1 | 3 | 1,301 | 139 | ..... | 3,712 |
| July | 709 | 1,202 | 299 | 17 | 3 | 2 | 923 | 107 | 784 | 4,046 |
| August | 647 | 1,609 | 839 | 19 | 5 | 6 | 509 | 95 | 196 | 3,925 |
| September . . | 593 | 1,591 | 1,229 | 485 | 46 | 5 | 478 | 89 | 112 | 4,628 |
| October | 452 | 926 | 933 | 943 | 303 | 42 | 451 | 52 | 1,288 | 5,390 |
| November . . | 227 | 940 | 510 | 253 | 27 | 3 | 1,231 | 103 | 142 | 3,436 |
| December . . | 239 | 1,398 | 497 | 263 | 39 | 5 | 647 | 63 | 896 | 4,047 |
| TOTAL | 7,593 | 17,051 | 8,322 | 2,782 | 506 | 89 | 8,410 | 961 | 3,418 | 49,132 |

LEAK, WASTE AND SHUT-OFF DEPARTMENTS.

The following table shows the work done by the leak, waste and shut-off force :

| 1896. | Leak and Waste Notices Served. | Bills and Shut-off Notices Delivered and Served. | Shut-off for Back Taxes. | Shut-off for Leaks. | Water Turned On. | Charges for Shutting Off Water. | Complaints Investigated. |
|----------------|--------------------------------------|---|-----------------------------|------------------------|---------------------|---------------------------------------|-----------------------------|
| January..... | 90 | 3,750 | 61 | 14 | 20 | \$90.00 | 48 |
| February..... | 78 | 4,100 | 58 | 10 | 16 | 75.00 | 52 |
| March..... | 212 | 4,520 | 75 | 18 | 38 | 211.50 | 58 |
| April..... | 370 | 4,610 | 112 | 13 | 61 | 369.50 | 71 |
| May.... | 883 | 35,125 | 420 | 20 | 282 | 711.00 | 95 |
| June | 908 | 5,230 | 508 | 22 | 210 | 882.50 | 186 |
| July... .. | 872 | 4,100 | 612 | 19 | 301 | 908.50 | 202 |
| August | 781 | 4,625 | 630 | 14 | 382 | 872.00 | 218 |
| September..... | 732 | 3,840 | 508 | 17 | 274 | 780.50 | 120 |
| October | 570 | 42,650 | 468 | 13 | 267 | 732.50 | 131 |
| November | 232 | 3,210 | 389 | 13 | 224 | 570.00 | 162 |
| December..... | 110 | 3,620 | 102 | 14 | 183 | 232.00 | 82 |
| TOTAL..... | 5,838 | 119,380 | 3,943 | 187 | 2,158 | \$5,874 00 | 1,425 |

WATER SERVICE PIPES LET AND PUT IN BY CONTRACT DURING YEAR ENDING DECEMBER 31, 1896,
SHOWING THE NUMBER OF PIPES AND THE TOTAL AMOUNT OF CONTRACT
AND AMOUNT FOR TAPS AND ASSESSOR'S COST.

| STREET | FROM | TO | Number of Pipes | Assessor's Cost | Taps | Amount of Contract |
|----------------------------|-------------------------------|----------------------------------|--------------------|-----------------|-----------|-----------------------|
| Aberdeen | Sixty-third | Sixty-seventh | 78 | \$ 117 60 | \$ 273 00 | \$ 913 56 |
| Ada | Fifty-ninth | Sixty-third | 60 | 90 00 | 210 00 | 674 12 |
| Ada | Fifty-fifth | Fifty-ninth | 139 | 209 50 | 486 50 | 1,284 70 |
| Albany avenue | Ohio | Chicago avenue | 28 | 42 00 | 98 00 | 189 00 |
| Ashland avenue | Balmoral avenue | Winnemac avenue | 74 | 111 13 | 259 00 | 867 15 |
| Atlantic | Forty-third | Goshen | 54 | 81 50 | 189 00 | 512 16 |
| Avers avenue | Grand avenue | North avenue | 103 | 154 58 | 360 50 | 1,243 13 |
| Berlin | California avenue | Myrtle | 25 | 37 53 | 87 50 | 329 22 |
| Bonney avenue | Ogden avenue | Douglas Park boulevard | 79 | 118 50 | 276 50 | 981 12 |
| Bonney avenue | Colorado avenue | Harrison | 10 | 15 00 | 35 00 | 151 68 |
| Carpenter | Sixty-third | Sixty-seventh | 48 | 72 00 | 118 00 | 511 28 |
| Champlain avenue | Sixty-third | Sixty-seventh | 74 | 111 51 | 259 00 | 905 25 |
| Champlain avenue | Seventy first | Seventy fifth | 98 | 147 16 | 343 00 | 986 70 |
| Collins | Kedzie avenue | Albany avenue | 24 | 36 08 | 84 00 | 325 36 |
| Columbia avenue | Humboldt | North avenue | 130 | 195 00 | 455 00 | 2,003 30 |
| Congress | Central Park avenue | Homan avenue | 46 | 69 00 | 161 00 | 583 74 |
| Congress Park | Van Buren | Harrison | 47 | 70 74 | 164 50 | 502 66 |
| Cornelia | Washenaw avenue | Rockwell | 45 | 67 70 | 157 50 | 526 75 |
| Cornelia | Wilton | Halsted | 38 | 57 04 | 133 00 | 523 60 |
| Cromwell | Milwaukee avenue | Fullerton avenue | 9 | 13 50 | 31 50 | 122 49 |
| Diversey avenue | Milwaukee avenue | Crawford avenue | 92 | 138 06 | 322 00 | 1,157 30 |
| Dobson avenue | Seventy first | Seventy third | 36 | 54 29 | 126 00 | 323 35 |
| Drexel avenue | Seventy-first | Seventy-third | 11 | 16 60 | 38 50 | 118 04 |
| Drexel avenue | Seventy-third | Seventy-fifth | 48 | 72 00 | 168 00 | 636 48 |
| Drake avenue | Chicago avenue | Huron | 26 | 39 12 | 91 00 | 277 30 |
| Eberhardt avenue | Kedzie avenue | Homan avenue | 55 | 82 85 | 192 50 | 657 40 |

| | | | | | | |
|-----------------------------|----------------------------|-----------------------------|-----|--------|--------|----------|
| Eighty-ninth | South Chicago avenue | Illinois Central R. R. | 10 | 15 06 | 35 00 | 154 40 |
| Eighteenth | Western avenue | California avenue | 73 | 109 82 | 255 50 | 671 28 |
| Elk Grove avenue | Armitage avenue | Webster avenue | 17 | 25 62 | 59 50 | 230 40 |
| Evans avenue | Seventy-first | Seventy-fifth | 63 | 94 77 | 220 50 | 716 04 |
| Ewing avenue | Ninety-second | 100th | 144 | 216 00 | 504 00 | 1,728 36 |
| Fifth | Cottage Grove avenue | St. Lawrence avenue | 15 | 22 50 | 52 50 | 199 50 |
| Fiftieth | Ashland avenue | Morgan | 9 | 13 52 | 31 50 | 95 29 |
| Fifty-ninth | Stony Island avenue | Cottage Grove avenue | 30 | 45 04 | 105 00 | 504 56 |
| Fifty-fourth place | Union avenue | Wallace | 17 | 25 62 | 59 00 | 208 98 |
| Fifty-sixth place | Stewart avenue | Wallace | 10 | 15 00 | 35 00 | 132 00 |
| Fifty-sixth | State | South Park avenue | 35 | 52 50 | 122 50 | 392 00 |
| Fleetwood | Blackhawk | North avenue | 10 | 15 02 | 35 00 | 163 28 |
| Fletcher | Perry avenue | Racine | 27 | 40 59 | 94 50 | 328 50 |
| Flournoy | California avenue | Washtenaw avenue | 36 | 54 00 | 126 00 | 329 13 |
| Forty first | Halsted | Stewart avenue | 22 | 33 15 | 77 00 | 193 45 |
| Forty-eighth | Halsted | Ashland avenue | 44 | 66 00 | 154 00 | 407 88 |
| Forty-sixth | Union avenue | Stewart avenue | 6 | 9 00 | 21 00 | 64 80 |
| Francisco | Van Buren | Twelfth | 10 | 15 06 | 35 00 | 115 44 |
| Gladys avenue | West Fortieth | West Forty-sixth | 164 | 247 30 | 574 00 | 2,014 26 |
| Grace | Ashland avenue | Southport avenue | 20 | 28 00 | 70 00 | 292 00 |
| Humboldt | Cornelia | Division | 33 | 49 65 | 115 50 | 452 61 |
| Huron | Western avenue | Washtenaw avenue | 11 | ..... | 38 50 | 190 72 |
| Irving Park boulevard | Halsted | Lake shore | 41 | 61 93 | 143 50 | 533 28 |
| Jackson avenue | Seventy-second | Seventy-fifth | 35 | 52 68 | 122 50 | 466 72 |
| Justine | Fifty-fifth | Sixty-third | 194 | 291 54 | 679 00 | 2,659 20 |
| Kimball avenue | Armitage avenue | Milwaukee avenue | 83 | ..... | 283 50 | 1,296 00 |
| Kinney avenue | North avenue | Humboldt | 143 | 214 67 | 500 50 | 2,061 89 |
| Leavitt | Archer avenue | Bross | 39 | 58 56 | 136 50 | 417 24 |
| Langley avenue | Seventy first | Seventy-fifth | 69 | 104 16 | 241 50 | 783 87 |
| Lawndale avenue | Colorado avenue | Harrison | 11 | 16 59 | 38 50 | 112 55 |
| Madison avenue | Sixty-seventh | Seventy-fifth | 88 | 132 25 | 308 00 | 1,308 31 |
| May | Sixty-third | Sixty-seventh | 51 | 76 97 | 178 50 | 622 75 |
| Monticello avenue | Frederick | North avenue | 38 | 59 22 | 133 00 | 464 52 |
| McLean avenue | Kimball avenue | Hamlin avenue | 47 | 70 56 | 164 50 | 462 43 |
| Ninety-first | Commercial avenue | Green Bay avenue | 31 | 46 65 | 108 50 | 469 19 |
| Ninety-fifth | Calumet river | Torrence avenue | 63 | 94 59 | 220 50 | 1,382 76 |
| Ninety-third | St. Lawrence avenue | Cottage Grove avenue | 39 | 58 86 | 136 50 | 418 50 |
| Olga | Grace | Waveland avenue | 20 | 30 10 | 70 00 | 264 50 |
| Oakley avenue | Hamburg | Ems | 21 | 31 61 | 73 50 | 223 96 |
| 120th | Halsted | Clinton | 34 | 51 20 | 119 00 | 392 16 |

WATER SERVICE PIPES LET AND PUT IN BY CONTRACT DURING YEAR—CONTINUED.

| STREET | FROM | TO | Number of Pipes | Assessor's Cost | Taps | Amount of Contract |
|---------------------|-----------------------|------------------------|-----------------|-----------------|-----------|--------------------|
| Park avenue | Forty-fifth | Forty-sixth | 40 | \$ 60 20 | \$ 140 00 | \$ 584 60 |
| Paulina | Graceland avenue | Berteau | 21 | 31 56 | 73 50 | 241 65 |
| Paulina | Fifty-ninth | Sixty-first | 74 | 111 28 | 259 00 | 676 82 |
| Pine | E. Ravenswood Park | Clark | 67 | 100 66 | 234 50 | 616 91 |
| Pine Grove avenue | Irving Park boulevard | 180 ft. N. of Byron | 20 | 30 16 | 70 00 | 279 24 |
| Rhine | Milwaukee avenue | Myrtle | 7 | 10 53 | 24 50 | 95 10 |
| Ridge avenue | Grand avenue | Devon | 13 | 19 62 | 45 50 | 145 22 |
| Rockwell | Twelfth | Twenty-second | 41 | 61 50 | 143 50 | 683 64 |
| State | Sixty-eighth | Seventy-fifth | 286 | 430 56 | 1,001 00 | 3,539 12 |
| Superior | Washtenaw avenue | California avenue | 30 | 45 29 | 105 00 | 289 81 |
| Schell avenue | Seventy-third | Illinois Central R. R. | 40 | 60 30 | 140 00 | 507 30 |
| Schell avenue | Seventy-first | South Chicago avenue | 29 | 43 51 | 101 50 | 344 51 |
| Seventy second | Schell avenue | Illinois Central R. R. | 17 | 25 62 | 59 50 | 215 74 |
| Seminary avenue | Eddy | Newport avenue | 11 | 16 60 | 38 50 | 148 84 |
| Sealey avenue | Fifty-third | Fifty-fourth | 6 | 9 03 | 21 00 | 63 99 |
| Sixty-seventh | Morgan | Loomis | 116 | 174 08 | 406 00 | 1,625 08 |
| Sixty-seventh | Halsted | Sangamon | 18 | 27 00 | 63 00 | 239 40 |
| Sixty-seventh | South Park avenue | Stony Island avenue | 168 | 252 34 | 588 00 | 1,483 10 |
| Sheridan road | Bryn Mawr avenue | North Fifty-ninth | 96 | 144 00 | 336 00 | 1,152 00 |
| Stanley Terrace | Jackson boulevard | Van Buren | 8 | 12 00 | 28 00 | 88 56 |
| Station | Leavitt | Western avenue | 26 | 39 03 | 91 00 | 271 15 |
| St. Louis avenue | Ogden avenue | Twenty-sixth | 190 | 285 63 | 665 00 | 2,161 57 |
| St. Lawrence avenue | Seventy-third | Seventy-fifth | 54 | 81 29 | 189 00 | 714 67 |
| Thomas | North Leavitt | North Wood | 19 | 28 65 | 66 50 | 275 16 |
| Thirty seventh | Halsted | Laurel | 32 | 48 03 | 112 00 | 323 49 |
| Turner avenue | Twelfth | Douglas Park boulevard | 30 | 45 22 | 105 00 | 334 88 |
| Twenty-fifth | Rockwell | Lawndale avenue | 46 | 69 24 | 161 00 | 470 84 |
| Union avenue | Fifty-ninth | Sixty first | 18 | 27 00 | 63 00 | 230 40 |
| Van Buren | West Fortieth | West Forty-sixth | 197 | 295 66 | 689 50 | 2,308 68 |
| Victor | Evanston avenue | Swift | 23 | 34 30 | 80 50 | 231 84 |
| Vincennes avenue | Sixty-third | South Chicago avenue | 132 | 198 98 | 462 00 | 1,744 06 |
| Washington avenue | Everett | Center | 53 | 79 56 | 185 50 | 643 87 |

| | | | | | | |
|-------------------------|-----------------------|---------------------|-------|-------------|-------------|-------------|
| Wellington avenue | Lincoln | Perry | 53 | 79 55 | 185 50 | 712 84 |
| West Fortieth | Armitage avenue | North avenue | 137 | 206 44 | 479 50 | 1,867 74 |
| West Forty-second | Lake | Twelfth | 96 | 144 03 | 336 00 | 853 47 |
| Woodlawn avenue | Seventy-first | Seventy-fifth | 42 | 63 21 | 147 00 | 696 15 |
| TOTALS ..... | ..... | ..... | 5,586 | \$ 8,256 91 | \$19,493 50 | \$68,092 48 |

Average cost per pipe under contract let in 1895.....\$11 72⁵⁶/₁₀₀Average cost per pipe under contract let in 1896.....12 18²⁸/₁₀₀Cost per pipe in 1896 over 1895......46⁴²/₁₀₀

LIST OF STREETS ORDERED FOR IMPROVEMENT, WITH ESTIMATES, NUMBER AND COST OF WATER SERVICE PIPES RETURNED TO SUPERINTENDENT OF SPECIAL ASSESSMENTS DURING THE YEAR 1896.

| STREET | FROM | TO | Number of Pipes | Amount |
|--------------------------|--------------------------|---------------------------|--------------------|------------|
| Aberdeen..... | Forty-seventh | Fifty-first | 94 | \$1,692 00 |
| Albany avenue..... | Ohio | Chicago avenue..... | All in..... | |
| Avers avenue | North avenue | Grand avenue | 108 | 1,728 00 |
| Aldine avenue | Present terminus | Lake Shore drive | 25 | 400 00 |
| Ashland avenue..... | Archer avenue..... | Ill. & Mich. Canal.. | None Needed. | |
| Armour avenue | Fifty-eighth..... | Fifty-ninth..... | No Main..... | |
| Argyle | Clark | Evanston ave..... | 91 | 1,638 00 |
| Ashland avenue..... | Twenty-second | South to river | None Needed. | |
| Avers avenue | West Nineteenth | Ogden avenue | Not Assessed | |
| Aberdeen..... | Sixty-seventh..... | Sixty-ninth..... | Not Assessed | |
| Albany avenue..... | Elston avenue | Belmont avenue | 67 | 1,206 00 |
| Ashland avenue..... | Sixty-third | Sixty-ninth..... | Not Assessed | |
| Augusta | Robey | Leavitt | Duplicate | |
| Albany avenue..... | Kinzie | Chicago avenue | Duplicate | |
| Ashland avenue..... | Balmoral avenue..... | Edgewater place..... | Not Assessed | |
| Allen avenue | Milwaukee avenue | Kimball avenue | Not Assessed | |
| Ashland avenue..... | Balmoral avenue..... | Edgewater avenue | Duplicate | |
| Avers avenue | Twenty-second | C., B. & Q. R. R. | 29 | 522 00 |
| Bonaparte | Archer avenue | Lock | Duplicate | |
| Buffalo avenue | Eighty-seventh | Ninety-second | All in..... | |
| Bishop | Sixty-third | Sixty-fifth..... | 60 | 1,080 00 |
| Bishop | Sixty-fifth..... | Sixty-seventh..... | 66 | 1,188 00 |
| Baker avenue | Wallace | Wabash R. R. | Not Assessed | |
| Barnett | Robey | Leavitt | 43 | 774 00 |
| Bissell | Garfield avenue..... | Webster avenue | All in..... | |
| Berwyn avenue | Winthrop avenue | C., M. & St. P. Ry. | No Main..... | |
| Bernard avenue | Noble | Belmont avenue..... | Not Assessed | |
| Berlin | Western avenue | Leavitt | All in..... | |
| Carpenter | Sixty-seventh | Sixty-ninth..... | Not Assessed | |
| Canal | Archer avenue..... | To the bridge | No Main..... | |
| Central Boulevard | Garfield Park..... | Humboldt Park..... | No Main..... | |
| Cornelia..... | Robey | Leavitt | 53 | 954 00 |
| Cortland | North Fortieth ave. | N. Forty-fourth ave. | No Frontage..... | |
| Carroll avenue | North Fortieth ave. | N. Forty-fifth ave. | All in..... | |
| Chicago avenue | North Fortieth ave. | N. Forty-second ave. | Not Assessed | |
| Christiana avenue | Milwaukee avenue | George | Not Assessed | |
| Christiana avenue | Wellington avenue | Belmont avenue..... | Not Assessed | |
| Central Park avenue..... | Harrison..... | Twelfth..... | 74 | 1,332 00 |
| Catalpa place..... | Humboldt avenue..... | Edgewood avenue | 59 | 1,062 00 |
| Cross | Lyman | Thirty-first..... | All in..... | |
| Commercial | Addison | Lincoln..... | All in..... | |
| Curtis | Lake | Huron | All in..... | |
| Carpenter | Chicago avenue..... | George | All in..... | |
| Cottage Grove ave..... | Sixtieth..... | Seventy-first..... | All in..... | |
| Center | Clark | Southport avenue | All in..... | |
| Cortez | California avenue | Humboldt..... | No Frontage | |
| Champlain avenue..... | Sixty-third | Sixty-seventh..... | 74 | 1,204 00 |
| Cornelia..... | Wilson..... | Halsted..... | 45 | 720 00 |
| Curtis | Fulton | Carroll avenue | Duplicate | |
| Crescent place | Evanston avenue..... | North Halsted..... | No Main..... | |
| Craft..... | Aldine..... | Belmont avenue | All in..... | |
| Dix | Front..... | George | Notified..... | |

LIST OF STREETS ORDERED FOR IMPROVEMENT—CONTINUED.

| STREET | FROM | TO | Number of Pipes | Amount |
|-----------------------|----------------------|----------------------------|----------------------|------------|
| Dearborn..... | Fifty-ninth..... | Sixtieth..... | Notified..... | |
| Dunning..... | Humboldt boulevard. | Alley W. Sawyer ave. | No Frontage..... | |
| Dawson avenue .. | Milwaukee avenue .. | Wellington avenue.. | Not Assessed..... | |
| Drake avenue..... | Elbridge avenue..... | Belmont avenue..... | Not Assessed..... | |
| Dunning..... | Sacramento avenue.. | California avenue .. | Not Assessed..... | |
| Evergreen avenue.. | Rockwell..... | California avenue .. | All in..... | |
| Emerald avenue..... | Fifty-ninth..... | Sixtieth..... | Not Assessed..... | |
| Emerald avenue..... | Seventy-second..... | Seventy-fifth..... | Not Assessed..... | |
| Erie avenue..... | 130th..... | Howard avenue..... | No Main..... | |
| Eastwood avenue.. | Robey..... | Leavitt..... | All in..... | |
| Evanston avenue.. | Thorndale avenue.. | Devon avenue..... | Out of District..... | |
| West Eighteenth .. | Western avenue .. | California avenue .. | 84..... | \$1,184 00 |
| Evanston avenue.. | Lawrence avenue .. | Foster avenue..... | Duplicate..... | |
| Estes avenue..... | Ridge Avenue boul. | Lake Michigan..... | Out of District..... | |
| Edgewater place .. | Ashland avenue..... | Clark..... | No Frontage..... | |
| Elbridge avenue .. | N. Central Park ave. | Noble..... | Not Assessed..... | |
| Eberly avenue..... | Belmont avenue..... | Noble..... | Not Assessed..... | |
| Enis..... | Western avenue..... | Leavitt..... | Not Assessed..... | |
| Fiftieth place..... | Morgan..... | Halsted..... | 34..... | 612 00 |
| Forty-ninth place.. | Morgan..... | Halsted..... | 53..... | 954 00 |
| Fiftieth..... | Morgan..... | Center avenue..... | Duplicate..... | |
| Front..... | Lessing..... | Carpenter..... | All in..... | |
| Fay..... | Chicago avenue..... | Front..... | R. R. Property..... | |
| Fall..... | Madison..... | Warren avenue..... | No Frontage..... | |
| Fifty-fourth place.. | Union avenue..... | Wallace..... | 31..... | 496 00 |
| Fortieth court..... | West Park avenue.. | West Randolph..... | Notified..... | |
| Fortieth avenue "S" | Taylor..... | Sixteenth..... | Duplicate..... | |
| Fletcher..... | Racine..... | Perry..... | 28..... | 448 00 |
| Fisk..... | Springer avenue..... | Southern terminus. | Notified..... | |
| Forty-sixth..... | Loomis..... | Robey..... | Not Assessed..... | |
| Flournoy..... | Central Park avenue | Lawndale avenue .. | Duplicate..... | |
| West Fourteenth.. | Wood..... | Robey..... | All in..... | |
| N. Fortieth avenue. | West North avenue. | Armitage avenue .. | No Main..... | |
| Francisco avenue.. | Elston avenue..... | Belmont avenue..... | All in..... | |
| Fullerton avenue .. | N. Fortieth avenue. | N. Forty-eighth..... | No Main..... | |
| Forty-sixth..... | Greenwood avenue.. | Woodlawn avenue .. | All in..... | |
| Fullerton avenue .. | Kedzie avenue..... | N. Fortieth avenue.. | No Main..... | |
| S. Forty-fourth ave. | Madison..... | Lake..... | Notified..... | |
| S. Forty-third ave.. | Madison..... | Lake..... | Notified..... | |
| Fulton..... | S. Forty-fourth ave. | S. Forty-sixth ave .. | Not Assessed..... | |
| S. Forty-first court. | Colorado avenue..... | Harvard..... | 33..... | 594 00 |
| S. Forty-first avenue | Madison..... | Van Buren..... | No Frontage..... | |
| Forty-first avenue .. | Colorado avenue..... | Sixteenth..... | 138..... | 2,484 00 |
| Francisco avenue.. | Fullerton ave..... | Diversey..... | Not Assessed..... | |
| Frankfort..... | Hoynes avenue..... | Oakley avenue..... | Duplicate..... | |
| S. Fortieth avenue.. | Lake..... | Sixteenth..... | Duplicate..... | |
| Forty-seventh..... | Paulina..... | Western avenue..... | No Assessment..... | |
| George..... | Kedzie avenue..... | Woodard avenue..... | No Main..... | |
| Goodspeed..... | Forty-third..... | Forty-seventh..... | 63..... | 1,184 00 |
| Grand avenue..... | N. Forty-fourth ave. | N. Seventy-second avenue.. | No Main..... | |
| Grand avenue..... | Chicago ave..... | Division..... | Duplicate..... | |
| Gresham avenue .. | Milwaukee avenue .. | Noble..... | Not Assessed..... | |
| George..... | Sangamon..... | Carpenter..... | No Frontage..... | |
| Humboldt..... | West Division..... | Cornelia..... | 39..... | 624 00 |
| Hoynes avenue..... | Archer avenue..... | Thirty-fourth..... | All in..... | |
| Humboldt..... | Chicago avenue..... | Cornelia..... | 45..... | 810 00 |
| S. Hamilton avenue. | Archer avenue..... | Thirty-seventh..... | All in..... | |

LIST OF STREETS ORDERED FOR IMPROVEMENT—CONTINUED.

| STREET | FROM | TO | Number of Pipes | Amount |
|-------------------------|---------------------------|--------------------------------|-------------------------|-----------|
| Howard avenue . . . | Erie avenue | 138th | No Main | • |
| Halsted | Archer avenue | 155 ft. S. of Twenty-fifth pl. | All in | |
| Huron | Western avenue | Washtenaw avenue . . | 54 | \$ 864 00 |
| S. Hermitage ave . . | Forty-fifth | Forty seventh | 75 | 1,200 00 |
| Homan avenue | Kinzie | Central Park avenue . . | Duplicate | |
| Hoyne avenue | Harrison | Washington | All in | |
| Humboldt | Elston | Hesing avenue | No Frontage | |
| Hesing avenue | Kedzie | Elston avenue | No Frontage | |
| Hayes avenue | Sheridan road | Winthrop avenue | Out of District | |
| Homan avenue | Harrison | Flournoy | No Frontage | |
| Harding avenue | Chicago avenue | Augusta | 43 | 774 00 |
| West Huron | Rockwell | Washtenaw avenue . . . | Duplicate | |
| Harvard avenue | Sixty-third | Sixty-seventh | No Main | |
| Harvard | N. Fortieth avenue . . . | N. Forty-second ave . . | Not Assessed | |
| Humboldt avenue . . . | Western avenue | California avenue | Duplicate | |
| Herndon | Belmont avenue | Roscoe boulevard | Not Assessed | |
| Humboldt | Diversey avenue | C. & N.-W. Ry. | Duplicate | |
| Humboldt | Milwaukee avenue . . . | Diversey | Not Assessed | |
| Hamburg | Western avenue | Leavitt | All in | |
| Irving Park avenue . . | Halsted | 925 feet east | No Main | |
| Indiana avenue | Seventy-first | Seventy-third | No Main | |
| Iowa | Hoyne avenue | Leavitt | 30 | 540 00 |
| Irving avenue | Hamburg | Ems | No Assessment | |
| Jefferson | Lake | Austin avenue | Notified | |
| John's place | Halsted | C., B. & Q. R. R | Notified | |
| Justine | Sixty-third | Sixty-fifth | 52 | 936 00 |
| Justine | Sixty-fifth | Sixty-seventh | 73 | 1,314 00 |
| Kedzie avenue | Elston avenue | Belmont avenue | No Main | |
| Kimball avenue | Belmont avenue | Wellington | Not Assessed | |
| Linden place | Humboldt boulevard . . | Thomas avenue | No Main | |
| LaSalle | Thirty-ninth | L. S. & M. S. R. Ry. . . | Notified | |
| Lydia | Des Plaines | Halsted | Not Assessed | |
| Leavitt | Archer avenue | Thirty-first | All in | |
| Leland avenue | Pemberton | Sheridan road | Notified | |
| Lunt avenue | Ridge avenue | 516 ft. E. Sheridan rd. . | All in | |
| Linwood | California avenue | Humboldt | All in | |
| Lake View avenue . . . | Roslyn place | 173 ft. S. Arlington pl. . | Notified | |
| Lowe avenue | Seventy-second | Seventy-fifth | No Main | |
| Langley avenue | Ninety-first | Ninety-third | No Frontage | |
| Loomis | Sixty-third | Sixty-fifth | | |
| Laffin | Sixty-third | Sixty-fifth | No Main | |
| Loomis | Sixty-fifth | Sixty-seventh | 78 | 1,404 00 |
| Laffin | Sixty-fifth | Sixty-seventh | 34 | 810 00 |
| Lawndale avenue . . . | Colorado avenue | Harrison | 18 | 304 00 |
| Linden avenue | Kedzie avenue | North Troy | All in | |
| Law avenue | Harrison | Polk | Notified | |
| Leavitt | Chicago avenue | Division | 135 | 2,466 00 |
| Layton | Wallace | Stewart avenue | Not Assessed | |
| Lincoln | Forty-seventh | Fifty-first | All in | |
| Morgan | Sixty-fifth | Sixty-ninth | Not Assessed | |
| Morgan | Forty-seventh | Fifty-first | No Main | |
| May | Forty-eighth | Forty-ninth | No Main | |
| Monroe | Western avenue | 75 ft. E. Oakley ave. . . | Notified | |
| Montrose boulevard . . | Evanston avenue | C. & E. R. R. | No Frontage | |
| Marshfield avenue . . . | Lincoln | Cornelia | No Assessment | |
| Montrose boulevard . . | Robey | Western | No Frontage | |
| Marshfield avenue . . . | Forty-fifth | Forty-seventh | 24 | 432 00 |

LIST OF STREETS ORDERED FOR IMPROVEMENT—CONTINUED.

| STREET | FROM | TO | Number of Pipes | Amount |
|--------------------------|---------------------------|---------------------------|-----------------------|------------|
| May | Sixty seventh | Sixty-eighth | Not Assessed | |
| Monroe avenue | Sixty-eighth | Seventieth | No Main | |
| Marshfield avenue | Sixty-third | Sixty-fifth | Not Assessed | |
| Monticello avenue | Chicago avenue | Grand avenue | 129 | \$2,322 00 |
| Marvin place | Park avenue | Randolph | Not Assessed | |
| Mozart | Fullerton avenue | Diversey | No Main | |
| Morgan | Sixty-fifth | Sixty-ninth | Not Assessed | |
| McLean avenue | Kimball avenue | Hamlin avenue | 78 | 1,248 00 |
| McAlister place | Sibley | Loomis | All in. | |
| McAlister place | Sibley | Center avenue | All in. | |
| McAuley avenue | North avenue | Humboldt avenue | 231 | 3,636 00 |
| W. Nineteenth | May | Fisk | All in. | |
| Newberry avenue | Fourteenth place | C. & N.-W. Ry. | All in. | |
| Ninety-first | South Park avenue | Cottage Grove ave | Duplicate | |
| Ninety-first place | South Park avenue | Cottage Grove ave | 171 | 2,736 00 |
| Ninety-second | C. & W. Ind. R. R. | Cottage Grove ave | 129 | 2,080 00 |
| Ninety-second pl. | C. & W. Ind. R. R. | Cottage Grove ave | 100 | 1,600 00 |
| Ninety-third | St. Lawrence avenue | Cottage Grove ave | 41 | 656 00 |
| Ninety-first | Exchange avenue | South Chicago ave | No Main | |
| Noble | Ashland | Wood | All in. | |
| Nelson avenue | Blucher | Soult | 21 | 378 00 |
| Noble avenue | Kedzie | Central Park avenue | No Main | |
| Norwood avenue | Milwaukee avenue | Norwood Park | No Main | |
| Oakley avenue | Thirty-first | Thirty-fifth | 75 | 1,200 00 |
| Otto | Ashland avenue | C. E. & L. S. R. R. | Notified | |
| Otto | Gross Park avenue | Robey | Notified | |
| Ogden avenue | Warren avenue | Twelfth | Notified | |
| Oakley avenue | Hamburgh | Ems | 26 | 416 00 |
| Oakley avenue | Ems | Fullerton | 38 | 608 00 |
| Oakley avenue | Hamburgh | Fullerton | Duplicate | |
| Peoria | Forty-ninth | Fifty-first | No Main | |
| Peoria | Sixty-sixth | Sixty-ninth | Not Assessed | |
| Phillips | Halsted | Sangamon | 20 | 320 00 |
| Perry avenue | Sixty-fifth | Sixty-ninth | 15 | 270 00 |
| Phillips | Sangamon | Green | Duplicate | |
| South Park avenue | C. & W. Ind. Ry. | Ninetieth | No Main | |
| Pleasant place | Western avenue | Leavitt | All in. | |
| Pine Grove avenue | Sheridan road | 180 feet north | No Frontage | |
| Robey | Archer avenue | Thirty-fourth | All in. | |
| Robey | Archer avenue | Thirty-ninth | All in. | |
| Rockwell | W. Chicago avenue | Grand avenue | All in. | |
| West Roscoe | Kedzie avenue | Elston avenue | Notified | |
| Ridge road | Homan avenue | North City Limits | Out of District | |
| N. Ridgeway avenue | W. Chicago avenue | West Division | 122 | 2,196 00 |
| Rockwell | Augusta | Division | Duplicate | |
| Rice | Washtenaw avenue | Rockwell | Not Assessed | |
| Roscoe | Present E. terminus | Lake Shore drive | St. Improved | |
| Robey | Forty-seventh | Fifty-first | Not Assessed | |
| Sixty-ninth | South Park avenue | Calumet avenue | 14 | 252 00 |
| Sixty-seventh | Halsted | Morgan | 11 | 198 00 |
| Sixty-eighth | Halsted | Morgan | | |
| Sangamon | Sixty-sixth | Sixty-ninth | No Main | |
| Stone avenue | Morgan | Center avenue | 33 | 594 00 |
| Sangamon | Front | Lessing | No Frontage | |
| Superior | Halsted | Morgan | 33 | 594 00 |
| Sherman | Fifty-ninth | Sixtieth | No Main | |
| Sixtieth | Halsted | Union avenue | All in. | |

LIST OF STREETS ORDERED FOR IMPROVEMENT—CONTINUED.

| STREET | FROM | TO | Number of Pipes | Amount |
|--------------------|--------------------|---------------------------------|-----------------|-----------|
| Sixty-ninth | Halsted | Ashland avenue | Duplicate | |
| Sixty-eighth | Wentworth avenue | State | Duplicate | |
| Sixty-second | Madison avenue | I. C. R. R. | Notified | |
| Seminary avenue | Newport avenue | Eddy | 15 | \$ 240 00 |
| Stratford place | Eastern terminus | Lake Shore drive | Not Assessed | |
| St. Lawrence ave. | Ninety-first | Ninety-third | Not Assessed | |
| Sixty-fourth | Loomis | Ashland avenue | No Main | |
| Sixty-fifth | Loomis | Ashland avenue | Not Assessed | |
| Spaulding avenue | Van Buren | Congress | No Frontage | |
| Stanley terrace | Jackson boulevard | Van Buren | 10 | 160 00 |
| Superior avenue | Ninety-second | Ninety-third | 12 | 216 00 |
| Sixty-sixth | Loomis | Ashland avenue | No Main | |
| Sixty-seventh | Loomis | Ashland avenue | No Main | |
| Sheridan road | North Fifty-ninth | Bryn Mawr avenue | 87 | 1,740 00 |
| Sixty-eighth | Morgan | Center avenue | No Main | |
| Sacramento avenue | Elston avenue | Belmont avenue | 28 | 414 00 |
| Sacramento avenue | Milwaukee avenue | Diversey | No Main | |
| Seventy-second pl. | Woodlawn avenue | I. C. R. R. | No Main | |
| Seventy-first | State | Indiana avenue | No Frontage | |
| Seventy-first | State | Perry avenue | No Main | |
| Sheridan road | Hayes avenue | North City Limits | Out of District | |
| Sawyer avenue | Twenty-fourth | Twenty-sixth | 72 | 1,296 00 |
| South Chicago ave. | Eighty-seventh | Ninety-first | No Main | |
| Southport avenue | Morse avenue | Homan avenue | Out of District | |
| Springfield avenue | Chicago avenue | Augusta | 55 | 990 00 |
| Sixty-ninth | Addison avenue | Woodlawn avenue | Notified | |
| Sheridan road | Montrose avenue | Foster avenue | 104 | 2,120 00 |
| Sixty-fourth | Stewart avenue | Wentworth avenue | No Main | |
| Sixty-fifth | Stewart avenue | Wentworth avenue | No Main | |
| Sixty-sixth | Stewart avenue | Wentworth avenue | No Main | |
| Sixty-seventh | Stewart avenue | Wentworth avenue | Not Assessed | |
| Spaulding avenue | Twenty-fourth | Twenty-sixth | 60 | 1,080 00 |
| Sawyer avenue | Diversey avenue | Belmont avenue | Not Assessed | |
| Spaulding avenue | Diversey avenue | Belmont avenue | Not Assessed | |
| Sacramento avenue | Diversey avenue | C. & N.-W. Ry | Duplicate | |
| Sixty-eighth | Sangamon | Morgan | No Frontage | |
| Seventy-fourth | Yates avenue | Bond avenue | 140 | 1,890 00 |
| Turner avenue | West Twelfth | Douglas Park boul. | 40 | 640 00 |
| W. Twentieth place | Peoria | Sangamon | Notified | |
| Thirty-sixth | Ashland avenue | Robey | No Frontage | |
| Thirty-fifth place | Halsted | Laurel | Notified | |
| Troy | Elston avenue | Belmont avenue | No Main | |
| Tilden avenue | Aberdeen | Center avenue | All in | |
| Troy | Central Park boul. | Chicago avenue | All in | |
| Troy | Kinzie | Central Park boul. | All in | |
| West Thirteenth | Johnson | Canal | Notified | |
| Troy | Diversey avenue | C. & N.-W. Ry | Not Assessed | |
| Turner avenue | Jackson boulevard | Van Buren | Notified | |
| Union avenue | Seventy-second | Seventy-fifth | Not Assessed | |
| Union avenue | 118th | 119th | 20 | 360 00 |
| Union | Twelfth | Railroad tracks | 25 | 450 00 |
| Vincennes avenue | C. & W. Ind. R. R. | Ninety-first | No Frontage | |
| Wellington | Lincoln avenue | Perry | 103 | 1,792 00 |
| Water | St. Clair | E. line W. & L. H. C. C. D. Co. | Notified | |
| Wood | Forty-third | Forty-seventh | 91 | 1,638 00 |
| Wrightwood avenue | Logan Square | Hamlin avenue | No Main | |
| Wabansia avenue | Kedzie avenue | Central Park avenue | Not Assessed | |

LIST OF STREETS ORDERED FOR IMPROVEMENT—CONTINUED.

| STREET | FROM | TO | Number of Pipes | Amount |
|--------------------|---------------------|----------------------|--------------------|-----------|
| Whipple..... | Elston avenue | Belmont avenue | 43 | \$ 774 00 |
| Wellington | Ashland avenue | Wood | Duplicate ..... | ..... |
| Wood | Forty-seventh | Fifty-first | Not Assessed ..... | ..... |
| Winthrop avenue... | Lawrence avenue ... | Ainslee avenue | 61 | 1,098 00 |
| Woodard avenue ... | Milwaukee avenue .. | Spaulding avenue... | Not Assessed ..... | ..... |
| Wisner | Milwaukee avenue .. | Wellington | Not Assessed ..... | ..... |
| Wellington | Kedzie avenue | Kimball avenue | Not Assessed ..... | ..... |
| Wellington | Kedzie avenue | C. & N.-W. Ry..... | Not Assessed ..... | ..... |
| Yorktown | Thirty-first | Thirty-fifth | Notified ..... | ..... |
| Yale avenue | Sixty-third | Sixty-seventh | Not Assessed ..... | ..... |

Total number of streets assessed..... 70

Total number of pipes..... 4,306

Total amount for pipes\$74,086 00

PERMIT DEPARTMENT.

SCREW FERRULES INSERTED IN YEAR 1896.

| MONTHS. | $\frac{5}{8}$ -inch Ferrules Inserted. | $\frac{3}{4}$ -inch Ferrules Inserted. | 1-inch Ferrules Inserted. | Grand Total of Screw Ferrules Inserted. |
|----------------|--|--|---------------------------------|---|
| January..... | 80 | 84 | ..... | 164 |
| February..... | 97 | 152 | 2 | 251 |
| March..... | 157 | 255 | 8 | 420 |
| April..... | 324 | 418 | 7 | 749 |
| May..... | 347 | 506 | 20 | 873 |
| June..... | 237 | 1,685 | 11 | 1,933 |
| July..... | 239 | 1,428 | 14 | 1,681 |
| August..... | 251 | 885 | 9 | 1,145 |
| September..... | 240 | 1,255 | ..... | 1,495 |
| October..... | 204 | 899 | 9 | 1,112 |
| November..... | 149 | 791 | 2 | 942 |
| December..... | 185 | 557 | 14 | 756 |
| TOTAL..... | 2,510 | 8,915 | 96 | 11,521 |

DRIVEN FERRULES INSERTED DURING YEAR 1896.

| MONTHS. | $\frac{5}{8}$ -inch Ferrules Inserted. | $\frac{3}{4}$ -inch Ferrules Inserted. | 1-inch Ferrules Inserted. | Grand Total of Driven Ferrules Inserted. |
|---------------|--|--|---------------------------------|---|
| January..... | ..... | 91 | ..... | 91 |
| February..... | ..... | 4 | ..... | 4 |
| March..... | ..... | ..... | ..... | ..... |
| April..... | 1 | 458 | ..... | 459 |
| May..... | ..... | 713 | ..... | 713 |
| June..... | 50 | 48 | ..... | 98 |
| July..... | 46 | ..... | ..... | 46 |
| TOTAL..... | 97 | 1,314 | ..... | 1,411 |

NOTE.—All ferrules inserted subsequent to July 31, 1896, were screw ferrules.

SUMMARY OF FERRULES INSERTED.

| | $\frac{5}{8}$ -inch. | $\frac{3}{4}$ -inch. | 1-inch. | Grand Total. |
|-----------------------|----------------------|----------------------|---------|--------------|
| Screw ferrules | 2,510 | 8,915 | 96 | 11,521 |
| Driven ferrules | 97 | 1,314 | ..... | 1,411 |
| GRAND TOTAL..... | 2,507 | 10,229 | 96 | 12,932 |

Re-taps inserted in 1896 :

| | |
|--------------------------|-----|
| $\frac{5}{8}$ -inch..... | 510 |
| $\frac{3}{4}$ -inch..... | 327 |
| Total | 837 |

The number of applications made at this office for ferrules to water service pipes during the past year (exclusive of City contracts and re-taps) were as follows :

| | |
|-----------------------------------|-------|
| Inserted in old part of City..... | 1,825 |
| Inserted in Lake View..... | 1,233 |
| Inserted in Hyde Park..... | 1,135 |
| Inserted in Town of Lake..... | 653 |
| Inserted in Calumet..... | 258 |
| Inserted in Cicero..... | 344 |
| Inserted in Jefferson | 1,061 |
| GRAND TOTAL..... | 6,059 |

PERMITS.

Permits were issued during the year 1896 as follows :

| | |
|---|--------|
| For tapping water mains for pipes to inside of curb for future use..... | 7,529 |
| For tapping water mains for enlarged service pipes to houses previously supplied..... | 508 |
| For tapping water mains for service pipes to houses not previously supplied | 4,895 |
| For connection to service pipes inside of curb lines..... | 342 |
| For 8-inch cast iron pipes to be used as service pipes..... | 1 |
| For 6-inch cast iron pipes to be used as service pipes..... | 4 |
| For 4-inch cast iron pipes to be used as service pipes..... | 35 |
| For 3-inch cast iron pipes to be used as service pipes..... | 1 |
| For 2-inch cast iron pipes to be used as service pipes..... | 81 |
| For miscellaneous or special permits..... | 276 |
| GRAND TOTAL..... | 13,672 |

TABULATED STATEMENT SHOWING THE NUMBER OF FERRULES
INSERTED EACH YEAR FOR THE LAST SEVENTEEN YEARS,
AND THE TOTAL NUMBER IN USE DECEMBER 31, 1896.

| Year. | Original Town. | *Lake View. | Hyde Park. | *Town of Lake. | *Calumet. | *Cicero. | *Jeffer- son. | Total. |
|--------------------|-------------------|----------------|----------------|-------------------|-----------|----------|------------------|---------|
| <i>a</i> 1880..... | 63,510 | ..... | ..... | ..... | ..... | ..... | ..... | 63,510 |
| 1880..... | 4,439 | ..... | ..... | ..... | ..... | ..... | ..... | 4,439 |
| 1881..... | 5,678 | ..... | ..... | ..... | ..... | ..... | ..... | 5,678 |
| 1882..... | 5,213 | ..... | ..... | ..... | ..... | ..... | ..... | 5,213 |
| 1883..... | 6,656 | ..... | ..... | ..... | ..... | ..... | ..... | 6,656 |
| 1884..... | 6,637 | ..... | ..... | ..... | ..... | ..... | ..... | 6,637 |
| 1885..... | 6,555 | ..... | ..... | ..... | ..... | ..... | ..... | 6,555 |
| 1886..... | 8,083 | ..... | ..... | ..... | ..... | ..... | ..... | 8,083 |
| 1887..... | 8,808 | ..... | ..... | ..... | ..... | ..... | ..... | 8,808 |
| 1888..... | 10,089 | ..... | ..... | ..... | ..... | ..... | ..... | 10,089 |
| 1889..... | ..... | ..... | <i>b</i> 8,775 | ..... | ..... | ..... | ..... | 8,775 |
| 1889..... | 7,617 | 889 | 1,730 | 1,286 | ..... | ..... | ..... | 11,522 |
| 1890..... | 10,127 | 3,440 | 3,833 | 3,951 | 152 | 289 | 20 | 21,812 |
| 1891..... | 10,237 | 2,458 | 5,658 | 4,165 | 234 | 59 | 570 | 23,381 |
| 1892..... | 7,224 | 3,173 | 4,813 | 3,882 | 271 | 63 | 2,146 | 21,572 |
| 1893..... | 7,990 | 2,334 | 3,586 | 4,223 | 308 | 153 | 1,435 | 20,029 |
| 1894..... | 6,642 | 2,271 | 2,770 | 1,922 | 392 | 843 | 1,044 | 15,884 |
| 1895..... | 5,015 | 2,262 | 3,152 | 1,750 | 410 | 750 | 1,326 | 14,665 |
| 1896..... | 3,551 | 1,927 | 2,792 | 1,833 | 292 | 1,663 | 869 | 12,932 |
| Total | 184,071 | 18,754 | 37,109 | 23,017 | 2,059 | 3,820 | 7,410 | 276,240 |

* Number of ferrules inserted in suburbs previous to annexation, unknown.

a Number of ferrules inserted previous to 1880.

b Number of ferrules inserted in Hyde Park previous to annexation.

METER MECHANICAL DEPARTMENT.

| | |
|--|--------------|
| Number of meters in service December 31, 1895 | 4,949 |
| Number of meters set in new location during 1896..... | 263 |
| Total number of meters in service during 1896..... | 5,212 |
| Number of meters removed—property assessed | 50 |
| Number of meters removed permanently—supply cut off..... | 56 |
| Total number of meters removed during 1896 | 106 |
| Total number of meters in service December 31, 1896..... | 5,106 |
| Number of hydraulic elevators in use December 31, 1895 | 308 |
| Number of hydraulic elevators removed during 1896 | 28 |
| Total number of hydraulic elevators in use December 31, 1896..... | 280 |
| Number of meters set during 1896 in new location | 263 |
| Number of meters set during 1896 replacing others..... | 101 |
| Total number of meters set during 1896..... | 364 |
| Number of meters in stock December 31, 1895 | 28 |
| Number of meters bought from manufacturers during 1896 | 251 |
| Number of meters bought from private parties during 1896 | 80 |
| Number of meters furnished by private parties during 1896..... | 40 |
| Total number of meters on hand during 1896..... | 399 |
| Total number of meters set during 1896..... | 364 |
| Total number of meters on hand December 31, 1896..... | 35 |
| Number of meters repaired during 1896 for which bills were rendered..... | 1,368 |
| Number of meters repaired during 1895 for which bills were rendered..... | 1,248 |

NAMES AND SIZES OF WATER METERS IN USE DECEMBER 31, 1896.

| MAKE | SIZE | | | | | | | | | | TOTAL |
|--------------------|--------|--------|--------|--------|---------|--------|--------|--------|--------|---------|-------|
| | ½-inch | ⅝-inch | ¾-inch | 1-inch | 1½-inch | 2-inch | 3-inch | 4-inch | 6-inch | 10-inch | |
| Worthington | 5 | 262 | 377 | 1,147 | 912 | 866 | 468 | 31 | 3 | ..... | 4,071 |
| Thomson | ... | 1 | 16 | 16 | 41 | 27 | 15 | 15 | 7 | ..... | 188 |
| Crown | 1 | 4 | 26 | 60 | 68 | 101 | 33 | 86 | 17 | ..... | 396 |
| Hersey | ... | 1 | 26 | 39 | 72 | 108 | 58 | 48 | 16 | ..... | 368 |
| Gem | ... | ... | ... | ... | ... | 15 | 8 | 10 | 8 | 2 | 43 |
| Nash | ... | 10 | 29 | 34 | 13 | ... | ... | ... | ... | ... | 86 |
| Empire | ... | ... | ... | 3 | ... | ... | ... | ... | ... | ... | 3 |
| Westinghouse | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 |
| Total | 6 | 278 | 474 | 1,300 | 1,106 | 1,117 | 582 | 190 | 51 | 2 | 5,106 |

The foregoing meters are distributed among the various establishments as follows:

| | |
|---|-------|
| Flats and stores..... | 688 |
| Business houses..... | 887 |
| Residences and apartment buildings..... | 792 |
| Railroads | 413 |
| Manufactories | 1,088 |
| Breweries | 128 |
| Liveries..... | 142 |
| Packing houses..... | 105 |
| Laundries..... | 78 |
| Hotels | 211 |
| Office buildings | 217 |
| Theaters | 23 |
| Miscellaneous | 266 |
| Charitable institutions..... | 68 |
| <hr/> | |
| Total..... | 5,106 |

REPORT OF THE ACCOUNTING DEPARTMENT.

INCOME ACCOUNT.

REVENUE.

| | | |
|---|-----------------|-----------------|
| General Assessment (May 1, 1896)..... | \$ 2,566,834 90 | |
| Increase back tax..... | 6,983 80 | |
| Increase current tax..... | 90,213 12 | |
| Increase shut-off..... | 4,886 36 | |
| | <hr/> | \$ 2,668,918 18 |
| Less— | | |
| Discount allowed..... | \$ 315,885 74 | |
| Erroneous assessments refunded..... | 1,598 86 | |
| Decreased on account of municipal and public build- ings..... | 33,888 76 | |
| Decreased on account of religious, charitable and educational institutions..... | 29,154 88 | |
| Decreased on account of over-payments, as per affi- davits and special examinations, removal or destruction of buildings, changes to meter con- trol and other causes..... | 133,473 51 | |
| Allowances made on current bills to cover draw- back on amounts previously paid on vacant property, in accordance with City Ordinance passed January 14, 1895..... | 23,757 77 | |
| | <hr/> | 537,759 52 |
| Net revenue from assessed rates..... | | \$ 2,131,158 66 |
| Amount charged for water supplied through meters..... | | 1,039,283 43 |
| Assessor's miscellaneous charges for sprinkling wagons, tugs, skating rinks, etc..... | | 17,940 84 |
| Assessor's charges on special assessments..... | | 8,256 91 |
| | | <hr/> |
| | | \$ 3,196,639 84 |
| Less— | | |
| Net cost of operating Meter Mechanical Depart- ment, as per statement..... | \$ 11,812 57 | |
| Net cost of operating Permit Department, as per statement..... | 7,971 56 | |
| | <hr/> | 19,784 13 |
| Net revenue Bureau of Water..... | | \$ 3,176,855 71 |

EXPENSES.

| | | |
|--|------------|-----------------|
| Binding vouchers..... | \$ 56 36 | |
| Postage..... | 7,600 00 | |
| Railroad transportation..... | 205 10 | |
| Street-car tickets..... | 1,730 56 | |
| Printing and stationery..... | 3,526 32 | |
| Shut-off tools, etc..... | 123 43 | |
| Miscellaneous..... | 405 80 | |
| Pay rolls (Meter Mechanical and Permit Depart- ment omitted)..... | 206,242 15 | |
| | <hr/> | 219,889 72 |
| Net income Bureau of Water..... | | \$ 2,956,965 99 |

PERMIT DEPARTMENT—INCOME ACCOUNT.

DEBIT.

| | | | |
|---|----|-----------|-----------|
| Stock account, January 1, 1896, per inventory | | \$ | 4,079 03 |
| Amount paid for ferrules | \$ | 5,792 50 | |
| Amount paid for plugs..... | | 19 47 | |
| | | | 5,811 97 |
| Amount paid for printing and stationery | \$ | 173 10 | |
| Amount paid for transportation | | 334 15 | |
| Amount paid for drills..... | | 1,132 54 | |
| Amount paid for tools, tapes, etc..... | | 1,343 01 | |
| Amount paid for repairs to tapping machines..... | | 258 38 | |
| Amount paid for miscellaneous | | 55 14 | |
| | | | 3,296 32 |
| Salaries of clerks | \$ | 4,750 94 | |
| Salaries of inspectors..... | | 11,848 56 | |
| Salaries of tappers | | 13,230 54 | |
| Salaries of expressmen | | 12,024 00 | |
| Salaries of foremen..... | | 1,042 00 | |
| Salaries of laborers..... | | 5,182 00 | |
| | | | 48,078 04 |
| | | \$ | 61,265 36 |

CREDIT.

| | | | |
|--|-------------|-----------|-----------|
| Amount received for inserting ferrules, per cash book..... | \$ | 21,599 90 | |
| Amount charged for ferrules inserted for street improvement service and deducted from contractors' bills—5,586 at \$3.50 each..... | \$19,493 50 | | |
| Amount due for re-taps | 2,674 50 | | |
| | | 22,168 00 | |
| Amount received for 551 plumbers' licenses, at \$10.00 each | | 5,510 00 | |
| Stock on hand, as per inventory | | 4,015 90 | |
| | | | 53,293.80 |
| Net loss of the Department | \$ | | 7,971 56 |

METER MECHANICAL DEPARTMENT—INCOME ACCOUNT.

DEBIT.

| | | | | |
|--|----|--------|--------|-----------|
| Stock account, January 1, 1896, as per inventory.... | | \$ | 11,069 | 43 |
| Amount paid for meters | \$ | 15,404 | 54 | |
| Amount paid for covers..... | | 605 | 96 | |
| Amount paid for couplings..... | | 325 | 49 | |
| Amount paid for fittings..... | | 1,173 | 84 | |
| Amount paid for lumber..... | | 462 | 58 | |
| Amount paid for repairs..... | | 2,522 | 71 | |
| | | | | <hr/> |
| | | | | 20,495 12 |
| Amount paid for printing and stationery | \$ | 79 | 75 | |
| Amount paid for transportation | | 64 | 22 | |
| Amount paid for horse feed..... | | 216 | 00 | |
| Amount paid for tools | | 33 | 99 | |
| Amount paid for matches, oil, etc. | | 18 | 78 | |
| Amount paid for sawdust, nails, etc..... | | 45 | 30 | |
| | | | | <hr/> |
| | | | | 458 04 |
| Salary of superintendent | \$ | 1,500 | 00 | |
| Salary of foreman | | 1,200 | 00 | |
| Salaries of clerks | | 1,980 | 00 | |
| Salaries of meter-setters..... | | 5,758 | 00 | |
| Salaries of laborers..... | | 1,927 | 00 | |
| Salaries of expressmen | | 3,058 | 50 | |
| | | | | <hr/> |
| | | | | 15,423 50 |
| | | | | <hr/> |
| | | \$ | 47,446 | 09 |

CREDIT.

| | | | | |
|--|----------|----|--------|-----------|
| Cash received for meters, 2 inches and over | \$10,759 | 84 | | |
| Cash received for meters, under 2 inches | 9,084 | 26 | | |
| Cash received for repairs to meters | 4,938 | 35 | | |
| | | | \$ | 24,782 45 |
| Amount due and uncollected for repairs | \$ 4,102 | 75 | | |
| Stock on hand, as per inventory | 6,748 | 32 | | |
| | | | | <hr/> |
| | | | 10,851 | 07 |
| | | | | <hr/> |
| | | | | 35,633 52 |
| | | | | <hr/> |
| Net loss of the Department..... | | | \$ | 11,812 57 |

BALANCE SHEET.

DEBIT.

| | |
|---|---------------|
| Balance uncollected December 31, 1895..... | \$ 439,860 62 |
| Inventory, Meter Department, December 31, 1895... | 8,113 50 |
| Accounts receivable, Meter Department, December 31, 1895..... | 2,955 93 |
| Inventory, Permit Department, December 31, 1895.. | 4,079 03 |
| Cash from Comptroller in 1896 for merchandise..... | 24,955 37 |
| Cash from Comptroller in 1896 for expenses..... | 288,497 34 |
| Net income 1896, as per income account..... | 2,956,965 99 |

CREDIT.

| | | |
|---|----------------|----------------|
| Debit balance against Comptroller, December 31, 1896..... | | \$3,185,374 98 |
| Amount charged Cashier, Department of Public Works | 10,759 84 | |
| Amount charged Special Assessment Department.. | 27,750 41 | |
| Amount charged City Engineer's Department..... | 2,674 50 | |
| Inventory, Meter Mechanical Department..... | 6,748 32 | |
| Inventory, Permit Department | 4,015 90 | |
| Balance uncollected—assessed rates | 413,794 34 | |
| Balance uncollected—meter rates..... | 70,206 74 | |
| Balance uncollected—meter repairs..... | 4,102 75 | |
| | <hr/> | <hr/> |
| | \$3,725,427 78 | \$3,725,427 78 |

ANALYSIS OF LEDGER—ASSESSED RATES ACCOUNT.

| WARD | DEBIT | | | | | CREDIT | | | | | |
|------------|-------------------------|-----------------------|--------------|-------------|-------------|----------------|--------------|--------------|----------------|-------------------------|----------------|
| | Balance Jan. 1, 1896 | General Assessment | Increases | Refunds | Discounts | Total | Decreases | Discounts | Collections | Balance Dec 31, 1896 | Total |
| 1..... | \$12,854 14 | \$ 60,217 75 | \$ 2,337 02 | \$ 80 93 | \$ 10 82 | 75,500 66 | \$10,971 07 | \$ 6,831 46 | \$ 46,192 04 | \$ 11,506 09 | \$ 75,500 66 |
| 2..... | 8,154 95 | 60,507 75 | 1,078 67 | 201 59 | 94 89 | 71,037 85 | 9,418 97 | 6,626 42 | 45,290 89 | 9,701 57 | 71,037 85 |
| 3..... | 8,247 00 | 63,358 25 | 1,698 95 | 151 16 | 24 32 | 73,479 68 | 5,057 67 | 8,927 84 | 55,014 22 | 4,779 95 | 73,479 68 |
| 4..... | 8,389 55 | 78,705 70 | 1,377 44 | 134 03 | 22 14 | 88,628 86 | 7,387 22 | 9,586 53 | 62,940 84 | 8,714 27 | 88,628 86 |
| 5..... | 5,090 10 | 63,371 75 | 1,352 23 | 64 52 | 5 42 | 69,865 92 | 3,932 55 | 8,606 80 | 52,143 96 | 4,882 61 | 69,865 92 |
| 6..... | 9,860 90 | 67,753 50 | 2,885 49 | 35 07 | 9 98 | 80,574 39 | 5,020 72 | 8,736 44 | 55,724 43 | 11,092 74 | 80,574 39 |
| 7..... | 4,334 70 | 45,429 15 | 701 90 | 35 07 | 47 03 | 50,547 85 | 3,617 92 | 5,899 75 | 36,737 18 | 4,293 00 | 50,547 85 |
| 8..... | 4,727 62 | 44,050 50 | 923 26 | 7 87 | 862 90 | 48,565 88 | 2,539 16 | 5,935 83 | 36,369 30 | 3,121 59 | 48,565 88 |
| 9..... | 9,753 94 | 97,795 00 | 6,853 12 | 30 13 | 3 96 | 66,280 40 | 4,004 90 | 8,061 35 | 48,037 85 | 6,176 30 | 66,280 40 |
| 10..... | 11,167 35 | 76,516 55 | 1,101 10 | 117 44 | 118 82 | 114,558 56 | 5,964 71 | 13,023 15 | 84,427 94 | 10,261 13 | 114,558 56 |
| 11..... | 14,313 21 | 151,094 25 | 4,166 68 | 361 52 | 13 21 | 173,942 05 | 11,586 13 | 10,089 95 | 127,351 06 | 10,844 49 | 173,942 05 |
| 12..... | 15,259 92 | 81,141 25 | 2,771 45 | 137 28 | 4,006 39 | 99,330 78 | 5,639 70 | 10,371 25 | 67,359 24 | 15,260 59 | 99,330 78 |
| 13..... | 18,185 87 | 95,829 00 | 5,322 50 | 243 67 | 57 51 | 109,639 05 | 5,695 92 | 13,820 40 | 83,075 12 | 7,047 61 | 109,639 05 |
| 14..... | 18,827 95 | 98,129 00 | 4,983 02 | 109 23 | 82 23 | 122,131 43 | 10,758 86 | 9,966 13 | 84,209 48 | 14,737 86 | 122,131 43 |
| 15..... | 2,928 20 | 70,342 25 | 4,000 30 | 65 10 | 6 87 | 77,342 72 | 3,752 83 | 4,887 84 | 60,676 60 | 2,947 13 | 77,342 72 |
| 16..... | 5,190 14 | 38,307 50 | 6,007 77 | 75 90 | 78 90 | 44,269 21 | 3,732 93 | 8,296 19 | 29,966 19 | 6,136 25 | 44,269 21 |
| 17..... | 11,782 57 | 49,109 25 | 1,109 92 | 97 25 | 39 24 | 62,138 23 | 6,332 27 | 7,587 62 | 38,363 20 | 11,852 52 | 62,138 23 |
| 18..... | 9,401 00 | 67,688 50 | 1,619 27 | 64 60 | 635 19 | 79,388 56 | 11,147 43 | 9,967 99 | 42,110 38 | 10,786 54 | 79,388 56 |
| 19..... | 2,902 08 | 48,757 25 | 4,402 11 | 35 94 | 6 76 | 56,104 14 | 4,432 08 | 8,261 46 | 50,464 97 | 3,400 56 | 56,104 14 |
| 20..... | 2,807 02 | 66,278 75 | 3,769 27 | 82 21 | 75 64 | 72,962 89 | 5,845 23 | 8,778 56 | 52,671 01 | 3,024 54 | 72,962 89 |
| 21..... | 2,798 35 | 66,081 00 | 1,302 09 | 121 19 | 15 03 | 70,319 34 | 5,913 42 | 7,290 12 | 44,194 98 | 3,678 13 | 70,319 34 |
| 22..... | 4,334 12 | 54,475 00 | 2,215 09 | 37 41 | 15 03 | 61,076 65 | 7,734 69 | 8,753 27 | 57,578 85 | 8,304 51 | 61,076 65 |
| 23..... | 7,748 40 | 71,458 20 | 2,964 84 | 165 63 | 73 41 | 82,401 32 | 8,299 98 | 13,095 47 | 64,673 54 | 5,971 77 | 82,401 32 |
| 24..... | 8,478 28 | 98,699 25 | 4,624 30 | 165 52 | 73 41 | 112,040 76 | 4,924 39 | 11,698 02 | 76,170 12 | 17,016 87 | 112,040 76 |
| 25..... | 12,662 31 | 31,305 50 | 5,602 52 | 204 49 | 34 58 | 109,809 40 | 3,450 54 | 3,715 11 | 27,894 36 | 25,514 21 | 109,809 40 |
| 26..... | 24,651 01 | 35,802 50 | 4,050 51 | 87 17 | 13 03 | 60,604 22 | 2,274 63 | 3,930 19 | 47,429 27 | 10,401 12 | 60,604 22 |
| 27..... | 8,970 64 | 31,567 00 | 3,086 57 | 43 84 | 7 16 | 43,675 21 | 1,145 20 | 6,169 14 | 44,465 10 | 14,760 21 | 69,539 65 |
| 28..... | 13,413 51 | 54,782 05 | 1,074 52 | 218 80 | 50 77 | 69,539 65 | 9,487 86 | 12,353 71 | 131,051 79 | 32,158 48 | 102,783 24 |
| 29..... | 34,654 47 | 134,121 50 | 3,646 63 | 317 51 | 47 37 | 192,783 24 | 10,165 28 | 17,885 43 | 81,833 86 | 37,603 80 | 141,279 23 |
| 30..... | 30,643 53 | 103,868 80 | 6,441 66 | 277 87 | 43 13 | 141,279 23 | 10,165 28 | 17,885 43 | 121,500 56 | 17,363 81 | 166,915 08 |
| 31..... | 17,367 42 | 145,189 20 | 3,914 83 | 404 52 | 39 11 | 166,915 08 | 5,306 53 | 6,174 79 | 42,692 84 | 16,134 25 | 70,308 41 |
| 32..... | 13,908 46 | 53,914 00 | 2,346 13 | 121 73 | 18 09 | 70,308 41 | 10,687 54 | 13,301 67 | 98,965 84 | 38,578 86 | 161,583 91 |
| 33..... | 32,113 16 | 121,832 25 | 6,950 85 | 578 41 | 59 24 | 161,583 91 | \$221,557 09 | \$322,608 21 | \$2,109,521 54 | \$413,794 34 | \$3,067,481 18 |
| TOTAL..... | \$385,652 22 | \$2,566,834 90 | \$103,365 45 | \$ 4,913 63 | \$ 6,714 98 | \$3,067,481 18 | \$221,557 09 | \$322,608 21 | \$2,109,521 54 | \$413,794 34 | \$3,067,481 18 |

DETAILED STATEMENT OF CASH COLLECTED DURING 1896.
(NET.)

| 1896. | Assessed Rates. | Meter Rates. | Permits. | Licenses. | Assessor's Miscellaneous. | Meter Mechanical Dept. | TOTAL. |
|------------------|-----------------|----------------|--------------|------------|---------------------------|------------------------|----------------|
| January | \$ 35,021 52 | \$ 40,677 93 | \$ 523 30 | ..... | \$ 26 50 | \$ 472 40 | \$ 76,721 65 |
| February | 23,951 26 | 83,594 66 | 917 80 | \$ 810 00 | 53 50 | 952 90 | 110,280 12 |
| March | 24,773 57 | 92,255 39 | 1,466 50 | 1,900 00 | 91 13 | 1,343 20 | 121,829 79 |
| April | 20,609 08 | 69,764 60 | 2,184 00 | 590 00 | 993 40 | 1,754 95 | 95,896 03 |
| May | 369,477 56 | 92,661 09 | 3,093 10 | 410 00 | 2,740 01 | 2,045 93 | 470,427 69 |
| June | 496,891 23 | 82,770 33 | 3,261 00 | 190 00 | 2,830 00 | 1,638 13 | 587,580 69 |
| July | 113,173 97 | 83,742 28 | 2,015 90 | 680 00 | 3,542 92 | 1,239 70 | 204,394 77 |
| August | 44,542 15 | 78,735 79 | 1,709 30 | 670 00 | 2,961 01 | 614 00 | 129,232 25 |
| September, | 23,915 68 | 75,005 90 | 1,469 30 | 190 00 | 2,242 00 | 909 25 | 103,732 13 |
| October | 22,557 18 | 83,091 95 | 1,766 80 | 40 00 | 1,237 14 | 1,024 00 | 109,717 07 |
| November | 299,933 69 | 72,529 95 | 967 10 | 30 00 | 538 48 | 427 05 | 374,426 27 |
| December | 628,169 65 | 168,455 22 | 2,225 80 | ..... | 684 75 | 1,601 10 | 801,136 52 |
| TOTAL | \$2,103,016 54 | \$1,023,285 09 | \$ 21,599 90 | \$5,510 00 | \$17,940 84 | \$14,022 61 | \$3,185,374 98 |

The following amounts should be added to the foregoing :

| | |
|--|----------------|
| Amount due from Cashier, Department of Public Works, on account of large meters | \$ 10,759 84 |
| Amount due from Special Assessment Department for ferrules on street improvements | 19,493 50 |
| Amount due from Special Assessment Department for Assessor's cost on street improvements | 8,256 91 |
| Amount due from Engineer's Department for retaps | 2,674 50 |
| Total | \$ 41,184 75 |
| Grand total net collections from all sources | \$3,226,559 73 |

DETAILED STATEMENT OF ASSESSOR'S INCREASE AND DECREASE CHECKS FOR THE YEAR 1896.

| 1896. | INCREASE. | | | | DECREASE. | | | |
|-----------------|--------------|-------------|-------------|---------------|---------------|--------------|--------------|---------------|
| | Current Tax. | Back Tax. | Shut-off. | Total. | Current Tax. | Back Tax. | Draw-Back. | Total. |
| January | \$ 3,034 79 | \$ 46 26 | \$ 412 02 | \$ 3,493 07 | \$ 9,291 58 | \$ 1,641 36 | \$ 1,156 78 | \$ 12,089 72 |
| February | 3,965 79 | 50 00 | 321 01 | 4,336 80 | 6,105 47 | 2,690 31 | 642 87 | 9,438 65 |
| March | 5,867 01 | 11 80 | 429 27 | 6,308 08 | 2,974 52 | 2,232 46 | 868 92 | 6,075 90 |
| April | 2,713 46 | 7 50 | 448 05 | 3,169 01 | 5,339 14 | 1,670 52 | 583 54 | 7,593 20 |
| May | 7,015 07 | 117 00 | 667 30 | 7,799 37 | 17,881 30 | 5,255 84 | 3,170 40 | 26,307 54 |
| June | 6,686 48 | 174 75 | 580 33 | 7,441 56 | 15,326 31 | 4,386 27 | 4,493 96 | 24,206 54 |
| July | 8,332 60 | 229 25 | 362 02 | 8,923 87 | 8,336 60 | 4,073 73 | 1,541 40 | 13,951 73 |
| August | 8,046 43 | 3,299 58 | 233 14 | 11,579 15 | 5,633 36 | 4,910 06 | 377 59 | 10,921 01 |
| September | 12,935 65 | 2,418 42 | 344 52 | 15,698 59 | 7,055 68 | 4,083 73 | 212 50 | 11,351 91 |
| October | 25,314 22 | 403 99 | 293 63 | 26,011 84 | 3,317 80 | 2,068 56 | 159 63 | 5,545 99 |
| November | 3,046 86 | 200 75 | 378 81 | 3,626 42 | 5,815 59 | 3,684 75 | 4,964 04 | 14,464 38 |
| December | 3,254 76 | 24 50 | 416 26 | 3,695 52 | 68,380 81 | 4,361 40 | 5,586 14 | 78,328 35 |
| Total | \$ 90,213 12 | \$ 6,983 80 | \$ 4,886 36 | \$ 102,083 28 | \$ 155,458 16 | \$ 41,053 99 | \$ 23,757 77 | \$ 220,274 92 |

WATER OFFICE—DETAILED STATEMENT OF PAY ROLLS FOR THE YEAR ENDING DECEMBER 31, 1896.

| DEPARTMENTS. | Assessor's. | Collection. | Inspection. | Meter Rates. | Meter Mechanical | Permit. | Shut-off. | Total. |
|----------------|-------------|-------------|-------------|--------------|------------------|-------------|-------------|--------------|
| January | \$ 2,041 62 | \$ 4,699 96 | \$ 3,459 38 | \$ 2,081 25 | \$ 1,320 50 | \$ 3,951 81 | \$ 2,809 12 | \$ 20,363 64 |
| February | 3,076 02 | 7,841 63 | 5,719 07 | 2,343 75 | 1,414 50 | 5,043 75 | 2,746 88 | 28,185 60 |
| March..... | 2,453 15 | 5,659 96 | 4,752 84 | 2,265 00 | 1,293 00 | 3,699 94 | 2,133 75 | 22,257 64 |
| April..... | 2,429 15 | 5,633 33 | 4,612 50 | 2,265 00 | 1,285 00 | 3,673 50 | 2,022 00 | 21,920 48 |
| May..... | 2,354 15 | 5,531 72 | 4,612 50 | 2,265 00 | 1,266 00 | 3,699 76 | 2,134 50 | 21,863 63 |
| June..... | 2,354 15 | 5,530 83 | 4,587 50 | 2,343 00 | 1,201 00 | 3,796 52 | 2,176 50 | 21,989 50 |
| July..... | 2,374 15 | 5,608 33 | 4,462 50 | 2,398 50 | 1,265 00 | 3,873 00 | 2,223 75 | 22,205 23 |
| August..... | 2,373 51 | 5,537 77 | 4,462 50 | 2,343 00 | 1,311 00 | 3,910 76 | 2,154 00 | 22,092 54 |
| September..... | 2,429 15 | 5,586 93 | 4,462 50 | 2,340 50 | 1,288 00 | 4,004 00 | 2,176 50 | 22,287 58 |
| October..... | 2,374 15 | 5,586 43 | 4,462 50 | 2,260 50 | 1,338 00 | 4,143 00 | 2,283 00 | 22,447 58 |
| November..... | 2,264 15 | 5,490 00 | 4,490 00 | 2,030 00 | 1,333 00 | 4,030 00 | 2,110 50 | 21,747 65 |
| December..... | 2,357 23 | 5,652 05 | 4,549 59 | 2,107 50 | 1,324 50 | 4,252 00 | 2,355 75 | 22,593 62 |
| Total..... | \$28,880 58 | \$68,358 94 | \$54,633 38 | \$27,043 00 | \$15,639 50 | \$48,078 04 | \$27,326 25 | \$269,959 69 |

NOTE.—25 per cent. of January salaries were retained and added to the February rolls.

DETAILED STATEMENT OF ASSESSOR'S MISCELLANEOUS
RECEIPTS.

| 1896. | Inspection. | Leak and Waste. | Shut-off. | Sprinklers. | Tugs. | Miscella- neous. | Total. |
|-----------------|-------------|--------------------|-----------|-------------|---------|---------------------|-------------|
| January | \$ 23 50 | ..... | \$ 3 00 | ..... | ..... | ..... | \$ 26 50 |
| February | 12 50 | \$ 4 50 | ..... | ..... | ..... | \$ 36 50 | 53 50 |
| March | 34 50 | ..... | 9 13 | \$ 37 50 | ..... | 10 00 | 91 13 |
| April | 7 00 | ..... | 19 95 | 528 35 | ... .. | 438 10 | 993 40 |
| May | 280 50 | ..... | 29 01 | 2,357 50 | \$10 00 | 63 00 | 2,740 01 |
| June | 361 50 | ..... | ..... | 2,434 00 | 10 00 | 24 50 | 2,830 00 |
| July | 77 00 | 4 00 | 7 88 | 2,884 00 | ..... | 570 04 | 3,542 92 |
| August | 38 00 | 3 50 | 22 01 | 2,887 50 | 10 00 | ..... | 2,961 01 |
| September | 14 50 | 3 00 | 12 00 | 2,212 50 | ..... | ..... | 2,242 00 |
| October | 5 00 | 5 25 | 24 01 | 1,192 50 | 5 00 | 5 38 | 1,237 14 |
| November | 276 00 | ..... | 9 98 | 100 00 | 2 00 | 150 50 | 538 48 |
| December | 560 50 | 2 25 | 3 00 | ..... | ..... | 119 00 | 684 75 |
| Total | \$1,690 50 | \$22 50 | \$139 97 | \$14,633 85 | \$27 00 | \$1,417 02 | \$17,940 84 |

DETAIL OF GENERAL ASSESSMENT, FROM MAY, 1896, TO MAY, 1897.

| Ward. | Frontage. | Water Closets. | Urinals. | Baths. | Wash Basins. | Ex. Rooms and Persons. | Saloons. | Hose, Trough and Fountain. | Laundries. | Steam Heating and Engine. | Stables. | Miscellaneous. | Total Assessment. |
|-------|----------------|----------------|------------|--------------|--------------|------------------------|-------------|----------------------------|------------|---------------------------|-------------|----------------|-------------------|
| 1 | \$ 20,675 50 | \$12,086 25 | \$1,468 50 | \$ 950 25 | \$ 6,270 00 | \$ 6,988 25 | \$ 1,981 00 | \$ 539 00 | \$ 207 75 | \$ 4,911 75 | \$ 1,265 00 | \$ 2,974 50 | \$ 60,217 75 |
| 2 | 28,549 00 | 10,663 50 | 366 50 | 3,503 00 | 4,594 00 | 4,708 75 | 700 00 | 2,551 00 | 173 50 | 2,782 25 | 2,782 00 | 944 25 | 60,507 75 |
| 3 | 33,109 50 | 10,728 00 | 194 00 | 3,706 00 | 4,308 50 | 5,006 50 | 515 00 | 3,572 50 | 229 00 | 2,525 50 | 1,881 00 | 763 75 | 63,358 25 |
| 4 | 40,008 00 | 13,759 50 | 262 00 | 5,812 00 | 5,350 50 | 5,161 50 | 955 00 | 4,366 00 | 124 00 | 379 20 | 2,082 00 | 821 00 | 78,705 75 |
| 5 | 35,310 50 | 8,072 50 | 283 00 | 1,498 50 | 1,022 00 | 11,564 50 | 1,175 00 | 636 00 | 30 00 | 571 00 | 1,979 00 | 1,093 75 | 63,371 75 |
| 6 | 47,090 50 | 4,899 50 | 166 00 | 856 50 | 978 50 | 8,400 50 | 685 00 | 825 00 | 30 00 | 376 00 | 1,783 75 | 804 90 | 67,153 50 |
| 7 | 24,018 00 | 4,765 50 | 185 00 | 577 50 | 704 00 | 10,828 75 | 740 00 | 341 00 | 87 00 | 376 00 | 1,774 00 | 745 60 | 45,429 15 |
| 8 | 21,552 75 | 7,480 50 | 161 50 | 600 00 | 1,194 00 | 12,194 25 | 950 00 | 484 00 | 54 50 | 647 00 | 1,186 50 | 873 75 | 44,060 50 |
| 9 | 59,759 50 | 11,577 00 | 225 50 | 4,841 00 | 2,192 00 | 12,384 50 | 1,055 00 | 619 00 | 69 00 | 854 00 | 2,069 00 | 854 50 | 59,355 25 |
| 10 | 39,414 00 | 25,781 00 | 184 50 | 4,608 50 | 4,775 50 | 5,987 50 | 520 00 | 2,479 50 | 167 00 | 1,081 30 | 3,392 50 | 1,029 75 | 76,516 55 |
| 11 | 81,194 00 | 23,127 00 | 242 00 | 8,470 00 | 8,470 00 | 7,780 00 | 755 00 | 3,231 00 | 173 00 | 603 00 | 4,025 50 | 1,549 25 | 151,094 25 |
| 12 | 50,255 00 | 9,779 50 | 378 00 | 4,823 50 | 2,420 50 | 5,917 50 | 625 00 | 2,702 00 | 90 00 | 1,108 50 | 2,317 75 | 808 50 | 81,141 25 |
| 13 | 53,643 50 | 14,260 25 | 337 50 | 5,340 00 | 2,610 50 | 12,921 75 | 745 00 | 2,733 00 | 48 00 | 287 00 | 1,978 50 | 924 50 | 95,829 50 |
| 14 | 66,391 50 | 9,528 00 | 193 50 | 3,256 00 | 1,840 00 | 7,727 75 | 960 00 | 4,239 00 | 54 00 | 960 50 | 1,855 25 | 1,093 50 | 98,129 00 |
| 15 | 32,667 50 | 9,458 50 | 262 50 | 942 00 | 1,917 00 | 21,748 00 | 1,010 00 | 354 00 | 132 00 | 139 00 | 1,601 00 | 1,110 25 | 70,342 25 |
| 16 | 17,953 00 | 5,846 00 | 276 00 | 641 00 | 1,016 50 | 7,415 50 | 983 00 | 461 00 | 137 00 | 239 00 | 1,638 00 | 1,000 50 | 38,307 50 |
| 17 | 24,349 00 | 7,973 50 | 410 50 | 2,198 50 | 2,962 00 | 4,562 75 | 1,316 00 | 1,092 00 | 221 00 | 699 00 | 1,319 00 | 1,437 00 | 49,109 25 |
| 18 | 34,430 00 | 7,892 00 | 204 50 | 2,193 00 | 1,697 00 | 6,225 00 | 915 00 | 621 00 | 163 00 | 6,972 00 | 1,719 00 | 811 00 | 67,068 50 |
| 19 | 24,637 50 | 8,095 00 | 155 00 | 3,317 00 | 1,594 00 | 6,225 00 | 485 00 | 2,000 00 | 41 00 | 377 50 | 1,337 50 | 621 75 | 48,757 25 |
| 20 | 33,687 50 | 11,012 50 | 227 00 | 4,866 00 | 2,587 50 | 7,857 50 | 444 00 | 3,156 00 | 92 00 | 246 50 | 1,444 00 | 658 75 | 66,278 75 |
| 21 | 29,662 50 | 11,438 00 | 276 00 | 3,787 00 | 3,285 50 | 10,767 50 | 730 00 | 2,332 00 | 66 00 | 485 00 | 2,088 00 | 1,163 50 | 66,081 00 |
| 22 | 23,104 50 | 8,930 00 | 265 50 | 1,818 00 | 1,225 00 | 13,143 25 | 903 00 | 408 00 | 150 00 | 1,296 50 | 1,900 00 | 1,322 25 | 54,475 00 |
| 23 | 31,231 00 | 15,221 00 | 426 00 | 6,164 50 | 5,628 50 | 6,993 50 | 672 00 | 2,574 00 | 113 00 | 761 20 | 1,517 00 | 1,157 00 | 71,458 20 |
| 24 | 50,748 50 | 16,445 50 | 204 00 | 8,373 50 | 4,388 50 | 6,284 00 | 470 00 | 9,039 00 | 63 00 | 255 00 | 2,300 00 | 628 25 | 98,699 25 |
| 25 | 61,828 50 | 8,812 50 | 154 50 | 3,693 50 | 2,000 25 | 5,714 50 | 728 00 | 4,793 00 | 27 00 | 730 75 | 2,093 00 | 740 00 | 91,305 50 |
| 26 | 27,894 50 | 2,029 00 | 62 50 | 873 00 | 539 00 | 924 00 | 360 00 | 1,811 00 | 3 00 | 108 00 | 363 50 | 333 50 | 35,802 50 |
| 27 | 24,568 00 | 1,842 00 | 24 00 | 1,503 00 | 697 50 | 1,153 00 | 293 00 | 669 00 | 3 00 | 920 30 | 2,453 00 | 1,005 00 | 54,782 05 |
| 28 | 35,103 00 | 4,283 50 | 308 00 | 1,362 00 | 1,102 50 | 5,646 75 | 1,380 00 | 1,157 00 | 61 00 | 1,001 25 | 4,374 50 | 2,089 50 | 154,121 05 |
| 29 | 94,370 50 | 15,128 00 | 391 00 | 8,173 50 | 4,670 00 | 14,053 00 | 1,940 00 | 7,897 00 | 33 25 | 406 00 | 2,723 00 | 1,860 00 | 103,868 80 |
| 30 | 65,960 50 | 8,566 50 | 226 00 | 5,363 50 | 3,632 50 | 5,571 00 | 456 00 | 9,714 00 | 87 00 | 1,006 00 | 2,470 00 | 1,023 50 | 145,189 20 |
| 31 | 65,619 00 | 26,428 25 | 156 00 | 14,009 50 | 10,342 50 | 8,630 75 | 1,666 00 | 13,601 00 | 24 00 | 985 20 | 4,170 00 | 518 50 | 53,914 00 |
| 32 | 37,884 50 | 3,524 00 | 206 50 | 1,918 00 | 1,472 00 | 4,116 75 | 851 00 | 1,765 00 | 24 00 | 1,898 50 | 1,769 25 | 821 50 | 121,852 25 |
| 33 | 73,826 50 | 13,493 00 | 412 50 | 8,977 00 | 4,988 50 | 7,583 50 | 879 00 | 7,129 00 | 73 00 | 1,898 50 | 1,769 25 | 821 50 | 121,852 25 |
| Total | \$1,419,187 75 | \$345,825 75 | \$9,589 50 | \$130,357 75 | \$102,403 25 | \$279,020 25 | \$27,712 00 | \$106,808 50 | \$3,228 00 | \$34,084 70 | \$68,595 75 | \$34,021 70 | \$2,566,834 90 |

COMPARATIVE STATEMENT

OF

GENERAL ASSESSMENT FOR THE YEARS 1895 AND 1896.

| | 1895. | 1896. |
|---------------------------------|-----------------|-----------------|
| Frontage | \$ 1,343,042 00 | \$ 1,419,187 75 |
| Water closets | 321,237 00 | 345,825 75 |
| Urinals | 9,457 00 | 9,589 50 |
| Baths | 120,823 00 | 136,357 75 |
| Wash basins | 93,269 75 | 102,403 25 |
| Extra rooms and persons | 257,759 50 | 279,020 25 |
| Saloons | 27,757 00 | 27,712 00 |
| Hose, trough and fountains..... | 75,773 00 | 106,808 50 |
| Laundries | 4,389 25 | 3,228 00 |
| Steam heating and engines | 36,878 00 | 34,084 70 |
| Stables | 68,329 50 | 68,595 75 |
| Miscellaneous..... | 33,925 90 | 34,021 70 |
| Total | \$ 2,392,640 90 | \$ 2,566,834 90 |
| Increase 1896 over 1895..... | | \$ 174,194 00. |

I desire to say in conclusion that whatever has been accomplished worthy of praise is largely due to the active interest and support of yourself and His Honor, Mayor Swift, upon all questions pertaining to the welfare of the Bureau. For this, as well as for the courtesy to and confidence reposed in us at all times, the thanks of myself and staff are gratefully extended.

Respectfully submitted,

J. C. CRAIG,

Superintendent of Water.

REPORT OF THE

Bureau of Sewers

CITY OF CHICAGO

BUREAU OF SEWERS

HON. JOSEPH DOWNEY,

Commissioner of Public Works :

DEAR SIR:—Herewith I submit the Twenty-first Annual Report of the Bureau of Sewers, for the year ending December 31, 1896:

| | |
|--|----------------|
| For building sewers and catch-basins..... | \$721,869 88 |
| For cleaning sewers and catch-basins..... | 96,901 65 |
| For repairing sewers and catch-basins..... | 46,281 84 |
| For adjusting to grade manholes and catch-basins on streets being improved..... | 45,057 70 |
| For house drains..... | 27,938 63 |
| For appropriated salaries | 24,568 82 |
| For office expenses..... | 934 59 |
| For pumping stations..... | 38,949 01 |
| Total | \$1,002,502 12 |

NEW SEWERS AND CATCH-BASINS BUILT DURING THE YEAR 1896,
AND COST OF SAME.

| Length in Feet. | Size. | Average Cut. | Average Price per Foot. | Cost. |
|-----------------|----------|--------------|-------------------------|---------------|
| 970 | 6 -inch. | 5.0 | \$0.34 | \$ 324 90 |
| 2,438 | 9 " | 7.0 | .67 | 1,643 35 |
| 146,279 | 12 " | 7.0 | .99 | 144,758 76 |
| 52,460 | 15 " | 8.5 | 1.19 | 62,143 66 |
| 25,619 | 2 -foot. | 10.5 | 1.98 | 50,805 27 |
| 4,568 | 2½ " | 12.7 | 2.88 | 13,186 61 |
| 10,499 | 3 " | 12.8 | 3.39 | 35,667 69 |
| 3,061 | 3½ " | 13.2 | 3.85 | 11,774 84 |
| 10,499 | 4 " | 11.9 | 4.05 | 42,354 32 |
| 5,144 | 4½ " | 12.4 | 4.09 | 21,085 07 |
| 7,677 | 5 " | 13.3 | 4.53 | 34,789 41 |
| 8,755 | 5½ " | 11.2 | 4.84 | 42,445 39 |
| 4,942 | 6 " | 10.0 | 5.77 | 28,503 92 |
| 1,491 | 7 " | 16.1 | 10.67 | 15,907 75 |
| 1,732 | 8 " | 16.7 | 11.64 | 31,787 72 |
| 6,188 | 8½ " | 17.8 | 12.86 | 79,553 22 |
| 9,900 | 9 " | 17.8 | 10.62 | 105,138 00 |
| *303,172 | | | | \$ 721,869 88 |

* The above figures include cost of catch-basins, etc.

TOTAL NUMBER OF MANHOLES AND CATCH-BASINS IN PLACE
DECEMBER 31, 1896, IN THE CITY LIMITS.

| DIVISIONS. | Constructed During the Year. | | | Total Built During 1896. | Total Built Previous to 1896. | Total in Place December 31, 1896. |
|-----------------|------------------------------|-------|--------|--------------------------|-------------------------------|-----------------------------------|
| | South. | West. | North. | | | |
| Catch-basins .. | 911 | 987 | 303 | 2,201 | 43,583 | 45,784 |
| Manholes..... | 788 | 902 | 300 | 1,990 | 46,164 | 48,154 |

SIZE AND LENGTH OF SEWERS CONSTRUCTED IN THE DIFFERENT WARDS IN THE CITY
DURING THE YEAR 1896.

| WARDS. | 6-inch. | 9-inch. | 12-inch. | 15-inch. | 2-foot. | 2½-foot. | 3-foot. | 3½-foot. | 4-foot. | 4½-foot. | 5-foot. | 5½-foot. | 6-foot. | 7-foot. | 8-foot. | 8½-foot. | 9-foot. | TOTAL. |
|-------------|---------|---------|----------|----------|---------|----------|---------|----------|---------|----------|---------|----------|---------|---------|---------|----------|---------|---------|
| 6th | | | 2,437 | | 740 | | | | | | | | | | | | | 3,177 |
| 8th | | 242 | | | | | | | | | | | | | | | | 242 |
| 10th | | | 13,262 | 5,807 | 2,664 | | | | | | | | | | | | | 21,733 |
| 12th | | 1,185 | 3,178 | 1,982 | | | | | | | | | | | | | | 6,345 |
| 13th | | | 6,579 | 544 | 200 | | | | | | | | | | | | | 7,323 |
| 14th | | | 720 | | | | | | | | | | | | | | | 720 |
| 15th | | | 6,842 | 1,903 | | | | | | | | | | | | | | 8,745 |
| 16th | | | 150 | | | | | | | | | | | | | | | 150 |
| 17th | | | 626 | | | | | | | | | | | | | | | 626 |
| 20th | | | 386 | | | | | | | | | | | | | | | 386 |
| 21st | | | 15,232 | 4,050 | 2,085 | | | | | | | | | | | | | 21,397 |
| 23th | | | 12,738 | 3,119 | 1,998 | | 738 | | 5,687 | 2,478 | 5,655 | 6,955 | 4,942 | 1,491 | | | | 18,643 |
| 26th | 970 | | 19,453 | 13,563 | | | 1,476 | | | | | | | | | | | 62,650 |
| 27th | | | 14,882 | 2,630 | 3,349 | 1,338 | 3,346 | | | | | | | | 2,732 | 6,188 | 9,900 | 44,365 |
| 28th | | | 2,621 | | | | | | | | | | | | | | | 2,621 |
| 29th | | | 21,061 | 6,004 | 5,287 | | 5,677 | | 2,667 | | | | | | | | | 32,362 |
| 30th | | | 7,263 | 5,559 | 6,881 | 3,230 | | | | | | | | | | | | 32,600 |
| 31st | | | 8,106 | 419 | | | | | | | | | | | | | | 8,525 |
| 32d | | | 7,788 | 2,659 | 584 | | | | | | | | | | | | | 11,061 |
| 33d | | | 2,945 | 4,161 | 1,831 | | | 1,000 | 2,045 | 2,666 | 2,022 | 1,800 | | | | | | 19,521 |
| 34th | | 1,011 | | | | | | | | | | | | | | | | |
| Total | 970 | 2,438 | 146,279 | 52,460 | 25,619 | 4,568 | 10,499 | 3,061 | 10,449 | 5,144 | 7,677 | 8,755 | 4,942 | 1,491 | 2,732 | 6,188 | 9,900 | 303,172 |

TOTAL COST FOR THE CONSTRUCTION OF SEWERS AND CATCH-BASINS, AND MAINTAINING SAME, SINCE THE ESTABLISHMENT OF THE SEWERAGE SYSTEM IN 1855 TO JANUARY 1, 1897.

| Year. | Lineal feet of Sewers Built. | No. of Catch-Basins Built. | No. of Man-holes Built. | No. of House Drains Put In. | Cost of Cleaning Sewers and Catch-Basins. | Street Intersections and Repairs of Sewers. | Cost of Construction. |
|--|------------------------------|----------------------------|-------------------------|---|---|---|-----------------------|
| Previous to 1861. | 283,586 | 1,174 | 2,102 | 2,194 | \$ 5,619 48 | No amts. found on reports. | \$ 665,188 46 |
| 1861..... | 2,826 | 18 | 33 | 243 | 1,715 60 | \$ 2,951 76 | 3,617 31 |
| 1862..... | 15,676 | 72 | 66 | 365 | 4,897 24 | 3,024 07 | 57,036 42 |
| 1863..... | 39,605 | 192 | 204 | 536 | 5,065 40 | 2,058 11 | 169,527 38 |
| 1864..... | 25,021 | 189 | 183 | 512 | 9,417 81 | 4,597 63 | 87,221 48 |
| 1865..... | 29,948 | 223 | 168 | 1,288 | 13,818 07 | 7,493 56 | 137,643 02 |
| 1866..... | 48,127 | 327 | 271 | 3,732 | 28,445 16 | 7,773 65 | 225,564 53 |
| 1867..... | 39,681 | 418 | 555 | 3,703 | 26,540 81 | 9,581 42 | 416,730 51 |
| 1868..... | 47,841 | 480 | 293 | 3,261 | 26,954 06 | 11,287 08 | 197,152 92 |
| 1869..... | 139,705 | 771 | 928 | 3,979 | 26,015 68 | 7,527 16 | 654,141 26 |
| 1870..... | 78,166 | 626 | 468 | 5,187 | 21,464 30 | 10,954 74 | 258,664 70 |
| 1871..... | 50,716 | 277 | 357 | 3,093 | 17,415 46 | 42,557 72 | 153,295 36 |
| 1872..... | 47,342 | 245 | 341 | 1,435 | 21,484 16 | 16,975 40 | 173,255 76 |
| 1873..... | 146,702 | 897 | 1,015 | 4,691 | 31,229 27 | 29,781 97 | 450,222 90 |
| 1874..... | 222,322 | 1,054 | 1,474 | 6,292 | 36,884 57 | 21,996 72 | 587,507 38 |
| 1875..... | 120,971 | 958 | 789 | 3,365 | 32,098 23 | 28,107 40 | 842,932 89 |
| 1876..... | 15,248 | 155 | 75 | 1,172 | 29,345 41 | 19,803 29 | 79,545 28 |
| 1877..... | 64,666 | 363 | 431 | 1,822 | 35,763 33 | 16,959 44 | 291,829 63 |
| 1878..... | 88,031 | 492 | 603 | 1,544 | 25,704 37 | 19,259 49 | 37,264 97 |
| 1879..... | 145,381 | 820 | 1,043 | 2,953 | 29,286 67 | 10,649 69 | 180,840 50 |
| 1880..... | 79,128 | 271 | 554 | 4,196 | 25,561 48 | 25,068 11 | 92,544 08 |
| 1881..... | 132,076 | 548 | 917 | 4,810 | 34,512 15 | 30,967 89 | 452,310 06 |
| 1882..... | 98,515 | 792 | 725 | 5,677 | 33,969 35 | 26,618 05 | 224,450 16 |
| 1883..... | 75,364 | 835 | 497 | 5,963 | 34,749 74 | 25,140 81 | 232,084 33 |
| 1884..... | 101,547 | 751 | 654 | 5,957 | 43,678 03 | 37,893 29 | 258,020 91 |
| 1885..... | 118,647 | 796 | 854 | 6,325 | 46,532 18 | 45,333 02 | 203,188 03 |
| 1886..... | 103,193 | 734 | 723 | 7,441 | 51,110 46 | 50,707 64 | 177,647 24 |
| 1887..... | 90,584 | 756 | 605 | 8,100 | 50,264 65 | 43,789 60 | 186,496 98 |
| 1888..... | 104,903 | 816 | 674 | 8,152 | 52,422 41 | 53,782 97 | 228,567 57 |
| 1889..... | 171,023 | 1,351 | 1,190 | 4,303 | 61,503 01 | 63,459 25 | 350,234 54 |
| Annexed Districts } previous to 1890, } | 993,573 | 6,102 | 8,620 | Estimated cost of maintenance not known. | cost of construction, } own. } | ..... | 2,614,224 75 |
| 1890..... | 379,203 | 2,986 | 2,604 | 9,279 | 107,873 34 | 83,388 08 | 826,718 67 |
| 1891..... | 546,918 | 3,979 | 3,736 | 11,312 | 123,620 44 | 95,906 75 | 1,532,990 44 |
| 1892..... | 549,258 | 3,866 | 3,714 | 12,562 | 142,720 52 | 70,747 83 | 1,290,017 98 |
| Norwood and Rogers Park annexed previous to 1893 | 96,697 | 326 | 231 | No. of house drains and cost of construction not known. | cost of construction, } own. } | ..... | 172,846 30 |
| 1893..... | 708,176 | 4,811 | 4,825 | 14,198 | 132,633 51 | 114,702 78 | 1,606,720 09 |
| 1894..... | 350,944 | 2,597 | 2,259 | 8,928 | 154,225 45 | 130,749 03 | 1,014,489 86 |
| 1895..... | 196,349 | 1,515 | 1,409 | 1,621 | 134,424 44 | 93,713 66 | 356,950 01 |
| 1896..... | 303,172 | 2,201 | 1,990 | 6,161 | 96,901 65 | 91,339 54 | 721,869 88 |
| Totals..... | *6,900,831 | 45,784 | †48,180 | 176,352 | \$1,755,867 89 | \$1,356,648 60 | \$17,661,554 54 |

*Of this amount 5,897 feet have been taken up and replaced by sewers of larger size, leaving in place January 1, 1897, 6,894,934 feet, or 1,305.857 miles.

†Of this number, 26 manholes have been abandoned, leaving in place January 1, 1897, 48,154.

Of the above 1,305.857 miles, 501,902 miles are of brick construction and 803,936 miles are of vitrified pipe.

Length and Interior Diameter of Sewers in Place December 31, 1896, in the Different Wards of the City.

| WARDS. | 6 Inch. | 9 Inch. | 12 Inch. | 15 Inch. | 18 Inch. | 20 Inch. | 22 Inch. | 2 Feet. | 2½ Feet. | 2½ Feet. | 3 Feet. | 3½ Feet. | 3½ Feet. | 4 Feet. |
|--------|------------|------------|-------------|-------------|-------------|-------------|-------------|------------|-------------|-------------|------------|-------------|-------------|------------|
| 1st.. | | | 66,572 | 1,870 | | | | 15,210 | 6,077 | | 12,327 | | | 1,926 |
| 2d.. | | | 42,821 | 1,320 | | | | 25,369 | 282 | | 3,648 | | | 670 |
| 3d.. | | | 37,861 | 5,904 | 985 | | | 22,750 | | | 668 | | | 670 |
| 4th.. | | 1,889 | 43,481 | 10,462 | 6,156 | | | 28,117 | | | 5,057 | 916 | | 1,061 |
| 5th.. | | | 50,315 | 16,249 | 5,288 | | | 34,157 | | | 6,966 | 1,600 | | 4,180 |
| 6th.. | | | 75,443 | 37,095 | 10,128 | | | 54,867 | | | 10,446 | 1,685 | | 4,975 |
| 7th.. | | | 32,167 | 3,686 | | | | 21,572 | | | 4,137 | 2,958 | | 5,040 |
| 8th.. | | 242 | 36,601 | 4,403 | | | | 20,085 | | | 1,863 | 2,323 | | 5,040 |
| 9th.. | | | 40,987 | 18,726 | 125 | | | 13,013 | | | 4,214 | 3,972 | | 4,005 |
| 10th.. | | | 172,790 | 118,052 | 667 | | | 50,481 | | | 12,128 | 11,088 | | 12,856 |
| 11th.. | | | 45,789 | 3,925 | 999 | | | 34,093 | | | 1,582 | | | 9,541 |
| 12th.. | | 2,434 | 149,561 | 89,443 | 10,665 | | | 81,637 | | | 14,090 | 10,430 | | 10,260 |
| 13th.. | | 860 | 100,638 | 53,592 | 4,761 | | | 27,930 | | | 9,851 | 333 | | 11,950 |
| 14th.. | | 116 | 111,883 | 59,967 | 4,230 | | | 51,178 | | | 4,604 | 332 | | 5,217 |
| 15th.. | | | 124,483 | 115,869 | 330 | | | 60,583 | | | 5,444 | 1,626 | | 2,399 |
| 16th.. | | | 29,271 | 9,371 | | | | 16,778 | | | 2,265 | | | 5,275 |
| 17th.. | | | 21,643 | 650 | | | | 35,074 | | | 4,315 | | | 6,755 |
| 18th.. | | | 31,529 | | | | | 32,845 | | | | | | 9,390 |
| 19th.. | | | 42,641 | 1,114 | | | | 36,055 | | | 1,023 | | | 3,000 |
| 20th.. | | | 39,464 | 13,860 | 5,010 | | | 23,619 | | | 3,168 | 2,739 | | 2,510 |
| 21st.. | | | 47,213 | 6,848 | 1,275 | | | 16,900 | | | 515 | 1,020 | | 660 |
| 22d.. | | | 35,182 | 789 | 1,526 | | | 22,449 | | | 2,179 | | | 3,157 |
| 23d.. | | | 33,146 | 1,726 | | | | 25,833 | | | 1,962 | | | 2,591 |
| 24th.. | | | 36,071 | 4,482 | 661 | | | 44,310 | | | 4,531 | | | 7,591 |
| 25th.. | | 47,475 | 184,412 | 90,093 | 20,490 | 2,604 | | 33,207 | 4,817 | 1,985 | 11,580 | 4,810 | 885 | 11,965 |
| 26th.. | | 2,520 | 161,087 | 94,336 | 3,380 | | | 37,011 | | | 12,508 | 11,218 | | 10,253 |
| 27th.. | 970 | | 60,639 | 127,783 | 433 | | | 23,975 | | | 4,790 | 4,669 | | 2,336 |
| 28th.. | | | 129,116 | 61,569 | | 3,100 | | 28,397 | | | 14,918 | | | 6,380 |
| 29th.. | | 225 | 32,722 | 36,905 | 12,392 | 1,300 | | 9,343 | | | 7,023 | 740 | | 9,440 |
| 30th.. | | 1,913 | 167,259 | 132,932 | 24,151 | | | 47,891 | | | 6,639 | 7,982 | | 7,771 |
| 31st.. | 16,270 | 33,237 | 98,125 | 87,272 | 13,852 | 330 | 261 | 29,115 | | | 14,711 | 8,425 | | 19,017 |
| 32d.. | | 770 | 90,083 | 57,547 | 4,119 | 520 | | 112,118 | | | 4,726 | 2,451 | | 3,970 |
| 33d.. | | | 36,189 | 35,249 | 658 | | | 17,869 | | | 4,896 | 4,516 | | 9,130 |
| 34th.. | 769 | 32,777 | 144,642 | 84,812 | 6,917 | | | 81,316 | 4,771 | | 3,589 | 222 | | 200,861 |
| Total | 18,009 | 124,458 | 2,561,826 | 1,887,801 | 142,918 | 9,479 | 261 | 1,225,197 | 15,947 | 332,920 | 202,363 | 106,150 | 885 | |

Length and Interior Diameter of Sewers in Place December 31, 1896, in the Different Wards of the City—Continued.

| WARDS. | 4½ Feet. | 4¾ Feet. | 5 Feet. | 5½ Feet. | 6 Feet. | 6½ Feet. | 7 Feet. | 7½ Feet. | 8 Feet. | 8½ Feet. | 9 Feet. | 9½ Feet. | 10 Feet. | 10½ Feet. | TOTAL. |
|----------|----------|----------|---------|----------|---------|----------|---------|----------|---------|----------|---------|----------|----------|-----------|-----------|
| 1st.... | | | 247 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 121,262 |
| 2d.... | | | 4,255 | ..... | 1,480 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 96,110 |
| 3d.... | | | | | | | | | | | | | | | 86,265 |
| 4th.... | | 1,261 | 1,058 | ..... | 704 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 124,946 |
| 5th.... | | 2,600 | 1,360 | ..... | 1,680 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 131,415 |
| 6th.... | | 3,532 | 8,018 | ..... | 3,112 | 2,132 | ..... | 667 | ..... | ..... | ..... | ..... | ..... | ..... | 238,895 |
| 7th.... | | 280 | 5,750 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 79,273 |
| 8th.... | | 3,955 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 75,997 |
| 9th.... | | 3,675 | ..... | 2,651 | ..... | ..... | ..... | ..... | ..... | ..... | 1,625 | ..... | ..... | ..... | 94,884 |
| 10th.... | | 6,114 | 3,380 | 1,463 | 8,808 | 1,380 | 1,462 | ..... | 5,161 | 11,636 | ..... | ..... | ..... | ..... | 432,784 |
| 11th.... | | 18,440 | ..... | ..... | ..... | ..... | 1,983 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 116,594 |
| 12th.... | | 4,075 | ..... | 2,656 | 1,582 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 389,541 |
| 13th.... | | 1,995 | 2,809 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 242,249 |
| 14th.... | | 7,030 | 11,194 | 1,370 | 518 | ..... | 2,702 | 3,972 | 1,320 | ..... | ..... | ..... | ..... | ..... | 277,007 |
| 15th.... | | | 6,823 | 3,994 | 7,359 | ..... | 2,125 | 6,630 | 3,952 | ..... | 5,865 | ..... | ..... | ..... | 364,258 |
| 16th.... | | | 5,210 | ..... | 1,494 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 70,046 |
| 17th.... | | 6,940 | 6,817 | ..... | 1,296 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 92,490 |
| 18th.... | | 4,011 | 10,775 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 79,160 |
| 19th.... | | 10,130 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 109,558 |
| 20th.... | | 2,230 | 9,305 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 100,413 |
| 21st.... | | 2,843 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 91,134 |
| 22d.... | | 655 | 2,765 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 73,780 |
| 23d.... | | | 5,583 | ..... | 753 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 76,001 |
| 24th.... | | 2,615 | 5,537 | ..... | 3,301 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 105,540 |
| 25th.... | | 1,335 | ..... | 2,150 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 431,363 |
| 26th.... | | 2,648 | 11,555 | 2,362 | 6,660 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 368,442 |
| 27th.... | | 8,338 | 9,185 | 12,068 | 14,885 | 2,660 | 7,998 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 294,816 |
| 28th.... | | 1,350 | 1,458 | ..... | 1,532 | ..... | 1,984 | ..... | 5,401 | 6,188 | 13,534 | ..... | ..... | ..... | 301,085 |
| 29th.... | | 2,650 | 7,070 | ..... | 4,730 | ..... | 5,290 | 667 | ..... | ..... | 4,715 | ..... | ..... | ..... | 142,429 |
| 30th.... | | 7,812 | ..... | 2,654 | 2,635 | 3,965 | 4,010 | ..... | 5,339 | 5,300 | ..... | ..... | ..... | ..... | 445,023 |
| 31st.... | | 4,116 | 15,847 | 3,975 | 6,552 | 3,942 | 4,005 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 368,971 |
| 32d.... | | 2,200 | 1,950 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 307,632 |
| 33d.... | | 2,358 | 1,676 | 1,488 | 9,410 | 3,936 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 447,196 |
| 34th.... | | 7,965 | 5,637 | 10,214 | 4,724 | 1,325 | 2,656 | ..... | ..... | ..... | 2,005 | 4,650 | 5,300 | 5,285 | 127,857 |
| Total .. | 123,163 | 3,933 | 151,103 | 47,045 | 82,525 | 19,340 | 34,215 | 11,936 | 21,173 | 11,488 | 39,380 | 4,650 | 5,300 | 5,285 | 6,894,936 |

SEWERS CONSTRUCTED DURING THE YEAR 1896 IN THE WEST DIVISION.

| STREET | FROM | TO | Diam. in feet | Length in feet |
|----------------------------|---------------------------|---------------------------------|---------------------|----------------------|
| Augusta..... | N. Forty-second ave. . . | N. Forty-sixth avenue. | 1 | 2,578 |
| Avers avenue..... | Irving Park avenue . . . | Belle Plaine avenue. . . | 1½ | 665 |
| Avers avenue..... | Belle Plaine avenue. . . | Berteau avenue. | 1 | 420 |
| Avers avenue..... | Montrose avenue | Cullom avenue | 1½ | 664 |
| Avers avenue..... | Cullom avenue | Berteau avenue. | 1 | 667 |
| South Avers avenue . . | West Thirteenth | 1st Alley S. of Twelfth | 1 | 498 |
| South Avers avenue . . | West Fourteenth | West Thirteenth | 1½ | 660 |
| South Avers avenue . . | West Twenty-sixth . . . | West Thirty-first | 1 | 2,690 |
| Belle Plaine avenue. . . | Monticello avenue | Lawndale avenue | 1 | 335 |
| Berlin..... | N. California avenue . . | N. Talman avenue . . . | 1 | 965 |
| Boulevard way..... | West Twenty-fifth . . . | Douglas boulevard. . . | 1 | 368 |
| Carroll avenue..... | Albany avenue | Sacramento avenue . . . | 1 | 606 |
| Catalpa court..... | Fullerton avenue | Alley E. of Humboldt Pk. blvd.. | 1 | 685 |
| S. S. Central Park blvd. | Spaulding avenue | Kedzie avenue | 1 | 630 |
| S. S. Central Park blvd. | Ohio | Indiana avenue. | 1½ | 544 |
| S. S. Central Park blvd. | Indiana. | Austin avenue | 1 | 350 |
| S. S. Central Park blvd. | Ohio | C., M. & St. P. Ry. . . . | 1 | 435 |
| Chicago avenue | N. Fortieth avenue . . . | N. Forty-third avenue. . | 3 | 2,022 |
| Chicago avenue | N. Forty-third avenue. . | N. Forty-fifth avenue . . | 2½ | 1,338 |
| Chicago avenue | N. Forty-fifth avenue . . | N. Forty-sixth avenue. . | 1½ | 602 |
| E. S. Congress Park . . . | West Van Buren | West Harrison | 1 | 600 |
| W. S. Congress Park . . | West Van Buren | West Harrison | 1 | 600 |
| Cornelia..... | N. Forty-second ave. . . | N. Forty-fourth avenue . | 1 | 1,289 |
| Cortez..... | N. Forty-second ave. . . | N. Forty-fourth avenue . | 1 | 2,578 |
| Drake avenue | Diversey avenue. | Wolfram. | 1½ | 328 |
| Drake avenue | Wolfram. | Alley West of Milwaukee avenue. | 1 | 340 |
| W. S. Elston avenue. . . | Irving Park avenue . . . | Berteau avenue | 1 | 1,900 |
| E. S. Elston avenue . . . | Irving Park avenue. . . | Ridgeway avenue | 1½ | 900 |
| E. S. Elston avenue . . . | Ridgeway avenue | Avers avenue | 1 | 854 |
| Emmet. | Kedzie avenue | Northwest | 1 | 385 |
| N. Fairfield avenue. . . | Diversey avenue. | C. & N.-W. Ry. | 1 | 450 |
| N. Fortieth avenue . . . | Armitage avenue | Humboldt avenue | 1½ | 1,300 |
| N. Fortieth avenue . . . | Humboldt avenue | C., M. & St. P. Ry. . . . | 1 | 494 |
| N. Fortieth avenue . . . | Fullerton avenue | C., M. & St. P. Ry. . . . | 1 | 590 |
| N. Forty-first avenue . . | Montrose avenue | Cullom avenue. | 1½ | 670 |
| N. Forty-first avenue . . | Cullom avenue. | Berteau avenue | 1 | 667 |
| N. Forty-first court. . . | Montrose avenue | Cullom avenue. | 1½ | 660 |
| N. Forty-first court. . . | Cullom avenue | Berteau avenue | 1 | 671 |
| N. Forty-second avenue . | Montrose avenue | Cullom avenue. | 1½ | 670 |
| N. Forty-second avenue . | Cullom avenue | Berteau avenue | 1 | 666 |
| N. Forty-second avenue . | Montrose avenue | Linden avenue | 1 | 319 |
| N. Forty-second avenue . | Chicago avenue | Iowa avenue | 1 | 669 |
| N. Forty-second court . . | Chicago avenue | Iowa | 1 | 641 |
| N. Forty-second court . . | Linden avenue. | Sunnyside avenue | 1 | 273 |
| N. Forty-second court . . | Sunnyside avenue | Cullom avenue | 1½ | 1,080 |
| N. Forty-second court . . | Cullom avenue | Berteau avenue | 1 | 664 |
| S. Forty-second avenue. . | West Thirtieth. | West Twenty-eighth. . . | 1 | 1,347 |
| S. Forty-second avenue. . | West Thirty-first | West Thirtieth | 1½ | 672 |
| N. Forty-third avenue . . | Cullom avenue. | Sunnyside avenue | 1½ | 1,339 |
| N. Forty-third avenue . . | Cullom avenue. | Berteau avenue | 1 | 670 |
| N. Forty-third avenue . . | Sunnyside avenue | Wilson avenue | 1 | 667 |
| N. Forty-third avenue . . | Chicago avenue | Cortez | 2 | 1,671 |
| N. Forty-third avenue . . | Cortez | Thomas | 1½ | 347 |
| N. Forty-third court . . . | Chicago avenue | Iowa. | 1 | 642 |

WEST DIVISION—CONTINUED.

| STREET | FROM | TO | Diam. in feet | Length in feet |
|-----------------------------------|-------------------------------|--------------------------------|---------------------|----------------------|
| N. Forty-fourth avenue. | Chicago avenue | Iowa | 1 | 670 |
| S. Forty-fourth avenue. | West Fourteenth | West Fifteenth | 1½ | 665 |
| N. Forty-fourth avenue | West Fifteenth | 100 ft. N. of W. Sixteenth | 1 | 538 |
| N. Forty-fifth avenue . . | Irving Park avenue | West Bryon | 1½ | 662 |
| N. Forty-fifth avenue . . | Chicago avenue | Cortez | 2 | 1,678 |
| N. Forty-fifth avenue . . | Cortez | Thomas | 1½ | 344 |
| S. Forty-fifth avenue . . . | Chicago river | West Twelfth | 9 | 9,900 |
| S. Forty-seventh avenue | Harrison | Madison | 8½ | 2,672 |
| N. and S. Forty-eighth avenue . . | Madison | Lake | 8½ | 1,740 |
| N. and S. Forty-eighth avenue . . | Cortez | Division | 8½ | 1,110 |
| N. Forty eighth avenue | Division | North avenue | 8 | 2,732 |
| N. Forty-eighth avenue | North avenue | Grand avenue | 7 | 1,491 |
| N. Forty-eighth avenue | Grand avenue | Fullerton avenue | 4 | 3,752 |
| N. Forty-eighth avenue | Fullerton avenue | Wrightwood avenue . . | 3 | 1,476 |
| Folansbee | Alley W. of Sacramento avenue | Alley E. of Humboldt Pk. blvd. | 1 | 902 |
| Francisco | Polk | Lexington | 1 | 148 |
| Francisco | West Twenty-fifth | Douglas Park blvd. . . . | 1½ | 390 |
| Grand avenue | N. Forty-eighth avenue | N. Fifty-second avenue | 5½ | 2,960 |
| Grand avenue | N. Fifty-second avenue | Fifty-sixth avenue | 5 | 2,770 |
| Hamlin avenue | Irving Park avenue | Alley E. of Elston ave. . | 1 | 780 |
| Hamlin avenue | Elston avenue | Berteau avenue | 1 | 410 |
| Hamlin avenue | Montrose avenue | Cullom avenue | 1½ | 664 |
| Hamlin avenue | Cullom Avenue | Berteau avenue | 1 | 671 |
| Hamlin avenue | West Twenty-sixth | West Thirty-first | 1 | 2,690 |
| N. Harding avenue | Montrose avenue | Cullom avenue | 1 | 667 |
| N. Harding avenue | North avenue | Waubansia avenue | 1½ | 625 |
| N. Harding avenue | West Thirteenth | Alley S. of W. Twelfth . . | 1 | 498 |
| N. Harding avenue | West Fourteenth | West Thirteenth | 1½ | 660 |
| N. Harding avenue | West Twenty-sixth | West Thirty-first | 1 | 2,690 |
| N. Harding avenue | West Thirty-first | West Thirty-second | 1½ | 637 |
| N. Harding avenue | West Thirty-second | West Thirty-third | 1 | 640 |
| Hirsch | Spaulding avenue | Homan avenue | 1 | 643 |
| Homer | N. Albany avenue | West | 1 | 236 |
| West Huron | St. Louis avenue | Drake avenue | 1 | 300 |
| West Huron | Kedzie avenue | N. Spaulding avenue . . . | 1 | 632 |
| West Huron | North Fortieth | Lawndale avenue | 1 | 1,606 |
| Iowa | N. Forty-second ave | N. Forty-fourth ave . . . | 1 | 1,350 |
| Iowa | Western avenue | Campbell avenue | 1 | 640 |
| Lawndale avenue | Montrose avenue | Cullom avenue | 1½ | 675 |
| Lawndale avenue | Cullom avenue | Berteau avenue | 1 | 672 |
| Lawndale avenue | Belle Plaine avenue | Berteau avenue | 1 | 668 |
| Lexington | Kedzie avenue | Spaulding avenue | 1½ | 662 |
| Lexington | Spaulding avenue | St. Louis avenue | 1 | 1,338 |
| Lexington | St. Louis avenue | Central Park avenue . . . | 1½ | 660 |
| Madison | Forty-seventh avenue . . . | Forty-eighth avenue . . . | 8½ | 666 |
| Monticello avenue | Irving Park avenue | Belle Plaine avenue . . . | 1½ | 663 |
| Monticello avenue | Belle Plaine avenue | Berteau avenue | 1 | 665 |
| Monticello avenue | Montrose avenue | Cullom avenue | 1½ | 669 |
| Monticello avenue | Cullom avenue | Berteau avenue | 1 | 675 |
| Monticello avenue | West North avenue | 32 ft. N. of Hirsch | 1 | 1,210 |
| Montrose avenue | River | Kimball avenue | 6 | 4,942 |
| Montrose avenue | Kimball avenue | N. Fortieth avenue | 5½ | 3,995 |
| Montrose avenue | N. Fortieth avenue | N. Forty-fourth ave . . . | 5 | 2,885 |
| Montrose avenue | N. Forty-fourth ave | N. Forty-eighth ave . . . | 4½ | 2,478 |
| Montrose avenue | N. Forty-eighth ave | W. S. Milwaukee ave . . | 4 | 1,985 |
| Moffat | N. Albany avenue | West | 1 | 232 |

WEST DIVISION—CONTINUED.

| STREET | FROM | TO | Diam. in feet | Length in feet |
|--------------------------------|-------------------------------|---------------------------------|---------------------|----------------------|
| West Noble | California avenue | Elston avenue | 1 | 476 |
| Ohio | W. S. Central Park . . . | E. S. Central Park blvd. | 2 | 200 |
| Phillips | Green | East 117 feet | 1 | 150 |
| Ridgeway avenue | Irving Park avenue . . . | Alley E. of Elston ave. | 1 | 474 |
| Ridgeway avenue | Elston avenue | Berteau avenue | 1 | 740 |
| Ridgeway avenue | Montrose avenue | Cullom avenue | 1½ | 663 |
| Ridgeway avenue | Cullom avenue | Berteau avenue | 1 | 672 |
| Ridgeway avenue | North avenue | LeMoynes | 1½ | 598 |
| Ridgeway avenue | LeMoynes | Hirsch | 1 | 658 |
| North Sawyer avenue . . | S. S. Central Pk. blvd. | West Kinzie | 1 | 522 |
| St. Louis avenue | Colorado avenue | Alley North of Colorado avenue. | ¾ | 100 |
| St. Louis avenue | Jackson | Alley North of Jackson | ¾ | 140 |
| St. Louis avenue | Adams | Alley N. of Adams . . . | 1 | 175 |
| St. Louis avenue | Monroe | Alley N. of Monroe . . . | ¾ | 185 |
| St. Louis avenue | Alley S. of Grenshaw avenue . | Alley N. of Grenshaw avenue . | 1 | 317 |
| Springfield avenue . . . | Montrose avenue | Cullom avenue | 1½ | 666 |
| Springfield avenue . . . | Cullom avenue | Alley N. of Elston ave. | 1 | 342 |
| S. Springfield avenue . . | West Thirteenth | Alley S. W. of Twelfth . . . | 1 | 498 |
| S. Springfield avenue . . | West Fourteenth | West Thirteenth | 1½ | 660 |
| S. Springfield avenue . . | West Twenty-sixth . . . | West Thirty-first | 1 | 2,690 |
| West Superior | N. California avenue . . | Washtenaw avenue . . . | 1 | 625 |
| West Taylor | Central Park avenue . . . | Lawndale avenue | 1½ | 660 |
| Thomas | Forty-second avenue . . | Forty-sixth avenue . . . | 1 | 2,580 |
| Trumbull avenue | Huron | Chicago avenue | 1 | 625 |
| West Twenty-seventh . . | S. Fortieth avenue . . . | S. Springfield avenue . . . | 2 | 666 |
| West Twenty-seventh . . | Springfield avenue . . . | S. Hamlin avenue | 1½ | 700 |
| West Twenty-eighth . . . | S. Fortieth avenue . . . | Springfield avenue | 2 | 666 |
| West Twenty-eighth . . . | S. Springfield avenue . . | S. Hamlin avenue | 1½ | 700 |
| West Thirtieth | S. Fortieth avenue . . . | Springfield avenue | 2 | 666 |
| West Thirtieth | Springfield avenue . . . | Hamlin avenue | 1½ | 700 |
| West Thirty-first | S. Fortieth avenue . . . | Springfield avenue | 2 | 666 |
| West Thirty-first | Springfield avenue . . . | Hamlin avenue | 1½ | 700 |
| West Thirty-first | S. Fortieth avenue . . . | S. Forty-second ave. . . . | 3 | 1,324 |
| Whipple | Diversey avenue | George | 1½ | 665 |
| Whipple | Avondale avenue | North Wellington | 1½ | 640 |
| Wolfram | Drake avenue | Alley W. of Milwaukee avenue. | 1 | 400 |
| Wrightwood avenue . . . | Kimball avenue | Central Park avenue . . | 1 | 1,340 |
| Wright court | Grand avenue | First alley north | 1 | 208 |
| Total number of feet | | | | 150,121 |

SEWERS CONSTRUCTED DURING THE YEAR 1896 IN THE SOUTH DIVISION.

| STREET | FROM | TO | Diam. in feet | Length in feet |
|----------------------------|--------------------------------|--------------------------|---------------------|----------------------|
| Ada..... | Fifty-ninth..... | Sixtieth..... | 1 | 637 |
| Ada..... | Sixtieth..... | Sixty-second..... | 1½ | 1,340 |
| Ada..... | Sixty-second..... | Sixty-third..... | 1 | 641 |
| Ada..... | Alley S. of Garfield boulevard | P., C., C. & St. L. Ry. | 1 | 1,939 |
| Ada..... | West Fifty-ninth..... | North to railway..... | 1 | 276 |
| Alley S. of Garfield blvd. | Ashland avenue..... | Lafin..... | 1½ | 620 |
| Alley S. of Garfield blvd. | Lafin..... | Loomis..... | 1 | 675 |
| Alley W. of Drexel blvd. | Forty-third..... | Forty-fourth..... | 1 | 666 |
| Alley W. of Grand blvd. | Forty seventh..... | Forty-sixth..... | 1 | 584 |
| Alley N. of Fifty-second | Drexel boulevard..... | West..... | 1 | 302 |
| Armour avenue..... | Fifty-ninth..... | North..... | 1 | 559 |
| Avenue L..... | P., Ft. W. & C. Ry. | 100th..... | 1 | 273 |
| Avenue L..... | 100th..... | 101st..... | 1½ | 697 |
| Avenue L..... | 101st..... | 102nd..... | 1 | 724 |
| Avenue L..... | Ninety-seventh..... | Ninety-ninth..... | 1 | 1,326 |
| Avenue M..... | Ninety-fifth..... | Ninety-sixth..... | 2 | 584 |
| Avenue M..... | 100th..... | 101st..... | 1½ | 668 |
| Avenue M..... | Ninety-sixth..... | Ninety-seventh..... | 1½ | 661 |
| Avenue M..... | 101st..... | 102d..... | 1 | 698 |
| Avenue M..... | Ninety-seventh..... | B. & O. R. R..... | 1 | 1,042 |
| Avenue M..... | 100th..... | P., Ft. W. & C. Ry..... | 1 | 595 |
| Bishop..... | Sixty-first..... | Sixty-third..... | 1 | 1,326 |
| Bishop..... | Alley S. of Garfield boulevard | P., C., C. & St. L. Ry. | 1 | 1,977 |
| Bishop..... | West Fifty-ninth..... | North to railroad..... | 1 | 246 |
| Bross avenue..... | S. Oakley avenue..... | South Irving avenue..... | 1 | 362 |
| Butler..... | 118th..... | 119th..... | 1½ | 642 |
| Carpenter..... | Sixty-ninth..... | 15 ft. N. of Seventieth. | 1 | 630 |
| Coles avenue..... | Seventy-third..... | Seventy-fifth..... | 1 | 1,521 |
| Cregier avenue..... | Seventieth..... | Seventy-first..... | 1 | 646 |
| Elizabeth..... | Sixty-first..... | Sixtieth..... | 1½ | 660 |
| Elizabeth..... | Sixty-ninth..... | Seventieth..... | 1 | 659 |
| Elizabeth..... | Fifty-seventh..... | Fifty-eighth..... | 1 | 660 |
| Elizabeth..... | West Fifty-ninth..... | P., C., C. & St. L. Ry.. | 1 | 275 |
| Eighty-eighth..... | Halsted..... | Morgan..... | 4 | 1,339 |
| Eighty-eighth..... | Morgan..... | Centre avenue..... | 3½ | 1,323 |
| Eighty-eighth..... | Centre avenue..... | Loomis..... | 3 | 1,325 |
| Eighty-eighth..... | Loomis..... | Ashland avenue..... | 2½ | 1,328 |
| Eighty-eighth..... | Ashland avenue..... | Beverly avenue..... | 2 | 2,172 |
| Fifth avenue..... | Fifty-ninth..... | Alley N. of Fifty-ninth | 1 | 395 |
| Fifth avenue..... | West Forty-fifth..... | W. Forty-fifth place... | 1 | 96 |
| Fiftieth..... | Cottage Grove avenue. | East of Langley avenue | 1 | 553 |
| Fiftieth..... | St. Lawrence avenue.. | Vincennes avenue..... | 1 | 599 |
| Fiftieth..... | Woodlawn avenue..... | Kimbark avenue..... | 1 | 442 |
| Fifty-second..... | Halsted..... | Peoria..... | 1½ | 613 |
| Fifty-second..... | Peoria..... | Morgan..... | 1 | 634 |
| Fifty-fourth place... | Ellis avenue..... | Greenwood avenue..... | 1 | 375 |
| Fifty-sixth..... | South Park avenue..... | Calumet avenue..... | 1½ | 419 |
| Fifty-sixth..... | Calumet avenue..... | Indiana avenue..... | 1 | 702 |
| Fifty-seventh..... | Ashland avenue..... | Loomis..... | 2 | 1,282 |
| Hermitage avenue..... | Forty-fifth..... | Forty-sixth..... | 1 | 662 |
| Hermitage avenue..... | Fifty-first..... | Grand Trunk Ry..... | 1 | 1,168 |
| Howard court..... | Ninety-ninth..... | North 525 feet..... | 1½ | 539 |
| Howard court..... | 525 ft. N. of Ninety-ninth | Ninety-sixth..... | 1 | 1,484 |
| Howard court..... | Ninety-sixth..... | Ninety-fifth..... | 1½ | 643 |

SOUTH DIVISION—CONTINUED.

| STREET | FROM | TO | Diam. in feet | Length in feet |
|---------------------------------|-----------------------------------|----------------------------------|---------------------|----------------------|
| South Hoyne avenue .. | Thirty-fourth .. | Thirty-fifth .. | 1 | 617 |
| Indiana avenue .. | 127th .. | 124th .. | 5 | 2,022 |
| Indiana avenue .. | 124th .. | 120th .. | 4½ | 2,666 |
| Indiana avenue .. | 120th .. | Pumping Sta. 200 ft. S. of 116th | 4 | 2,095 |
| Indiana ave. & 130th .. | Calumet River .. | 127th .. | 5½ | 1,800 |
| Indiana avenue .. | 200 ft. S. of 116th .. | 116th .. | 3½ | 230 |
| Justine .. | Sixty-first .. | Sixty-third .. | 1 | 1,325 |
| Justine .. | Alley S. of Garfield boulevard .. | P., C., C. & St. L. Ry. | 1 | 1,950 |
| Justine .. | Fifty-ninth .. | P., C., C. & St. L. Ry. | 1 | 249 |
| Kimbark avenue .. | Fiftieth .. | Forty-ninth .. | 1 | 600 |
| Lafin .. | West Fifty-ninth .. | North to railroad .. | 1 | 249 |
| Lafin .. | Sixty-first .. | Sixty-third .. | 1 | 1,325 |
| Lafin .. | Alley S. of Garfield boulevard .. | P., C., C. & St. L. Ry. | 1 | 1,958 |
| Leavitt .. | Archer avenue .. | Thirty-fifth place .. | 1 | 150 |
| Leavitt .. | Archer avenue .. | Thirty-seventh .. | 2 | 740 |
| Longwood avenue .. | Ninety-ninth .. | 230 ft. N. of Ninety-eighth .. | 1¼ | 938 |
| Longwood avenue .. | 230 feet N. of Ninety-eighth .. | Ninety-fifth .. | 1 | 1,720 |
| Loomis .. | Fifty-ninth .. | Sixtieth .. | 1 | 637 |
| Loomis .. | Sixtieth .. | Sixty-first .. | 1¼ | 656 |
| Loomis .. | West Fifty-ninth .. | North to railroad .. | 1 | 269 |
| Loomis .. | Sixty-first .. | Sixty-third .. | 1 | 1,325 |
| Loomis .. | Alley S. of Garfield boulevard .. | P., C., C. & St. L. Ry. | 1 | 1,973 |
| La Salle .. | 117th .. | Alley north of 118th .. | 1 | 492 |
| May .. | Sixty-seventh .. | Sixty-ninth .. | 1¼ | 1,324 |
| Marshfield avenue .. | Fifty-first .. | Sixty-second .. | 1¼ | 615 |
| Marshfield avenue .. | Sixty-second .. | Sixty-fourth .. | 1 | 1,841 |
| Marshfield avenue .. | Forty-fifth .. | Forty-sixth .. | 1 | 695 |
| S. Normal parkway .. | Butler .. | C., R. I. & P. Ry. .. | 1 | 1,247 |
| Ninety-fifth .. | Halsted .. | Morgan .. | 4 | 1,328 |
| Ninety-fifth .. | Morgan .. | Lafin .. | 3 | 3,328 |
| Ninety-fifth .. | Lafin .. | P., C., C. & St. L. Ry. | 2½ | 867 |
| Ninety-fifth .. | Charles avenue .. | Longwood avenue .. | 1¼ | 1,194 |
| Ninety-fifth .. | Longwood avenue .. | Robey .. | 2½ | 1,035 |
| Ninety-ninth .. | Charles avenue .. | Howard court .. | 2 | 1,003 |
| Ninety-ninth .. | Howard court .. | Longwood avenue .. | 3 | 1,024 |
| Ninety-ninth .. | Longwood avenue .. | Leavitt .. | 2 | 2,210 |
| Ninety-ninth .. | Avenue L .. | Avenue K .. | 1 | 327 |
| South Oakley avenue .. | Archer avenue .. | C. & A. R. R. .. | 1 | 211 |
| South Oakley avenue .. | Ill. & Mich. canal .. | Thirty-third .. | 1 | 650 |
| 111th .. | Wentworth avenue .. | Clark .. | 1¼ | 562 |
| 111th .. | Clark .. | State .. | 1 | 751 |
| 116th .. | Indiana avenue .. | Prairie avenue .. | 3½ | 330 |
| 117th .. | Wentworth avenue .. | Perry avenue .. | 1¼ | 644 |
| Prairie avenue .. | 116th .. | Northward .. | 3½ | 440 |
| Prairie avenue .. | Sixty-ninth .. | Seventy-first .. | 1¼ | 1,333 |
| Prairie avenue .. | Fifty-fifth .. | Fifty-eighth .. | 2 | 1,831 |
| Prairie avenue .. | Fifty eighth .. | Fifty-ninth .. | 1¼ | 666 |
| Prairie avenue .. | Fifty-ninth .. | Sixtieth .. | 1 | 832 |
| Perry avenue .. | Alley north of 117th .. | Alley north of 118th .. | 1 | 644 |
| Sixty-fifth .. | Langley avenue .. | 190 ft. W. of Langley avenue .. | 1 | 226 |
| Seipp avenue .. | Sixty-ninth .. | Seventieth .. | 1¼ | 663 |
| Seipp avenue .. | Seventieth .. | Seventy-first .. | 1 | 636 |
| W. S. of Stony Island avenue .. | Seventy-third .. | Seventy-fifth .. | 1¼ | 314 |
| Sixty-first .. | Ashland avenue .. | Loomis .. | 2 | 1,316 |
| Sixty-first .. | Loomis .. | Ada .. | 1 | 320 |

SOUTH DIVISION—CONTINUED.

| STREET | FROM | TO | Diam. in feet | Length in feet |
|----------------------------|----------------------|-------------------------|---------------------|----------------------|
| Sixty-first | Centre avenue | Ada | 2 | 1,016 |
| Sixty-first | Ashland avenue | Marshfield avenue | 2 | 358 |
| Sixty-second | Ashland avenue | Loomis | 2 | 1,815 |
| Sixty-third | Ashland avenue | Marshfield avenue | 1¼ | 366 |
| Sixty-ninth | Ashland avenue | Lafin | 2 | 654 |
| Sixty-ninth | Lafin | Bishop | 1¼ | 327 |
| Sixty-ninth | Bishop | Loomis | 1 | 329 |
| Thirty-seventh place .. | Laurel | Gage | 1 | 405 |
| Throop | Fifty-ninth | Sixtieth | 1 | 636 |
| Throop | Sixtieth | Sixty-second | 1¼ | 1,317 |
| Throop | Sixty-second | Sixty-third | 1 | 666 |
| Union avenue | Sixty-first | Sixtieth place | 1 | 328 |
| Wood | 101st place | 103rd | 2 | 842 |
| Wood | 101st | 101st place | 1¼ | 411 |
| South Winchester | Eighty-seventh | Eighty-eighth | 1 | 747 |
| Total number of feet | | | | 108,814 |

SEWERS CONSTRUCTED DURING THE YEAR 1896 IN THE NORTH DIVISION.

| STREET | FROM | TO | Diam. in feet | Length in feet |
|---|--|--|---------------------|----------------------|
| Alley N. of Montrose boulevard. | Clifton avenue | West | 1 | 184 |
| Berteau avenue | Western avenue | Irving avenue | 2 | 992 |
| Berteau avenue | Irving avenue | Leavitt | 1½ | 329 |
| Berteau avenue | Robey | West 467 feet | 1 | 497 |
| Berteau avenue | 25 ft. W. of E. L. E. Ravens'd Pk. | West | 1 | 121 |
| Byron | Commercial avenue | E. Ravenswood Park | 1 | 272 |
| Cameron avenue | Southport avenue | Alley east of Clark | 1 | 767 |
| Claremont avenue | Berteau avenue | Belle Plaine avenue | 1 | 664 |
| Clifton avenue | Wilson avenue | Evanston avenue | 1 | 496 |
| Clifton avenue | Wilson avenue | Sunnyside avenue | 1½ | 675 |
| Clifton avenue | Sunnyside avenue | W. S. of Montrose blvd | 1 | 658 |
| Commonwealth avenue | Surf | Diversey avenue | 1 | 484 |
| N. side of Diversey ave. | 124 ft. E. of E. L. E. Ravens'd Pk | 164 ft. W. of W. L. W. Ravens'd Pk | 3½ | 369 |
| S. side of Diversey ave. | 124 ft. E. of E. L. E. Ravens'd Pk | 164 ft. W. of W. L. W. Ravens'd Pk | 3½ | 369 |
| Dunning | Southport avenue | High | 1 | 307 |
| E. side of Evanston ave. | C., M. & St. P. Ry. | 420 ft. S. of S. Line Wilson ave. | 1 | 1,034 |
| E. side of Evanston ave. | Lawrence avenue | 590 ft. S. of S. Line Lawrence ave. | 1 | 620 |
| E. side of Evanston ave. | Sunnyside avenue | Montrose avenue | 1 | 593 |
| W. side of Evanston) avenue { | M. H. on E. Side, 275 ft. S. of S. Line Lawrence avenue | C. M. & St. P. Ry at 27 ft. E. of W. Line of Evanston ave | 1 | 584 |
| W. side of Evanston ave. | 190 ft. N. of N. Line Wilson ave | 65 ft. N. of N. L. Sunnyside ave | 1 | 870 |
| W. side of Evanston ave. | 65 ft. N. of N. L. Sunnyside ave | 111 ft. S. of S. L. Sunnyside ave | 1 | 242 |
| W. side of Evanston ave. | 111 ft. S. of S. L. Sunnyside ave | Montrose avenue | 1 | 640 |
| S. side of Foster avenue | 593 feet west of Lincoln ave | West | ½ | 970 |
| Gordon terrace | 547 E. of E. line of Clarendon. | East | 1 | 54 |
| Grace | North Robey | Alley W. of Lincoln ave | 1 | 477 |
| East side of Herndon | Wrightwood avenue | 123 ft. S. of Marianna | 1 | 514 |
| Huber | Herndon | Racine avenue | 1 | 626 |
| Irving Park avenue | 383 ft. E. of E. line of Pine Grove ave | East | 2 | 107 |
| Irving avenue | Irving Park avenue | Belle Plaine avenue | 1 | 665 |
| Irving avenue | Berteau avenue | Belle Plaine avenue | 1 | 665 |
| Junior terrace | Clarendon avenue | Fremont street | 1 | 562 |
| Kenmore avenue | Wilson avenue | Evanston avenue | 2 | 710 |
| Kenmore avenue | Wilson avenue | Winthrop avenue | 1½ | 160 |
| Kenmore avenue | Winthrop avenue | Lawrence avenue | 1 | 1,173 |
| Leavitt | Berteau avenue | Belle Plaine avenue | 1 | 667 |
| Leavitt | Irving Park avenue | Belle Plaine avenue | 1 | 668 |
| Leland avenue | Racine avenue | East | 1 | 51 |
| Leland avenue | Kenmore avenue | East | 1 | 100 |
| Leland avenue | Kenmore avenue | West | 1 | 100 |
| Leland avenue | Winthrop avenue | West | 1 | 51 |
| N. Marshfield avenue | 820 feet S. of Diversey avenue. | Alley N. of Wrightwood avenue | 1 | 303 |
| Montrose boulevard | Western avenue | Irving avenue | 2 | 1,006 |
| Montrose boulevard | Irving avenue | 50 ft. west of Leavitt | 1 | 255 |
| North side of Montrose boulevard | Clifton avenue | East | 1 | 150 |
| Oakley avenue | Berteau avenue | Belle Plaine avenue | 1 | 666 |
| Oakley avenue | Irving Park avenue | Belle Plaine avenue | 1 | 665 |
| Oakley avenue | Oakdale avenue | Noble at Clybourn ave | 1½ | 1,020 |
| Pine Grove avenue | Irving Park avenue | End of old sewer 180 ft. N. of Byron | 1 | 419 |
| Racine avenue | Wilson avenue | Sunnyside avenue | 1½ | 668 |
| Racine avenue | Sunnyside avenue | Montrose boulevard | 1 | 615 |
| Racine avenue | Wilson avenue | Evanston avenue | 1 | 946 |
| E. Ravenswood Park | Lawrence avenue | Winnemac avenue | 1 | 1,620 |
| Ridge avenue | 95 ft. N. - W. of Thome. | 917 ft. N. of Devon ave | 1½ | 1,770 |

NORTH DIVISION—CONTINUED.

| STREET | FROM | TO | Diam. in feet | Length in feet |
|----------------------------|--------------------------|--------------------------------|---------------------|----------------------|
| Ridge avenue | 917 ft. N. of Devon ave. | Pratt | 1 | 1,831 |
| Shades place | Orchard | 14 ft. W. of W. line of Vine . | 1 | 366 |
| School | Oakley avenue | 140 ft. E. of Irving ave. | 1 | 508 |
| Sheridan road | Foster avenue | Berwyn avenue | 1¼ | 629 |
| Sheridan road | Berwyn avenue | Catalpa avenue | 1 | 1,337 |
| Sheridan road | Catalpa avenue | Bryn Mawr avenue ... | 1¼ | 670 |
| Sunnyside avenue | Clifton avenue | West | 1 | 100 |
| Sunnyside avenue | Kenmore avenue | East | 1 | 166 |
| Sunnyside avenue | Clark | Alley east of Dover .. | 1 | 449 |
| Wayne avenue | Foster avenue | Berwyn avenue | 1¼ | 659 |
| Wayne avenue | Berwyn avenue | Catalpa avenue | 1 | 1,343 |
| Wayne avenue | Catalpa avenue | Bryn Mawr avenue ... | 1¼ | 621 |
| Wellington avenue | Clybourn avenue | Alley E. of Oakley ave. | 1 | 506 |
| Wilson avenue | Sheridan road | Evanston avenue | 2 | 765 |
| Wilson avenue | Evanston avenue | Racine avenue | 2 | 503 |
| Winthrop avenue | Kenmore avenue | Lawrence avenue | 1 | 1,361 |
| Total number of feet | | | | 42,002 |

WING SEWERS CONSTRUCTED DURING THE YEAR 1896 IN
THE WEST DIVISION.

| STREET | FROM | TO | Diam. in feet | Length in feet |
|------------------------------------|-----------------------|-------------|---------------------|----------------------|
| Cortez | Manhole in Humboldt | East | 1 | 40 |
| Thomas | Humboldt | East | 1 | 40 |
| Huron | Harding avenue | East | 1 | 40 |
| N. Forty-seventh ave .. | Irving avenue | South | 1 | 60 |
| Alley bet. Washington & Warren av. | Manhole in Kedzie av. | West | 9 | 246 |
| Alley bet. Sangamon and Morgan | Manhole in Maxwell .. | North | 9 | 242 |
| Alley bet. Harrison and Congress | Manhole in Kedzie av. | West | 9 | 232 |
| Alley bet. Harrison and Congress | Manhole in Homan av. | East | 9 | 282 |
| Total | | | | 1,182 |

WING SEWERS CONSTRUCTED DURING THE YEAR 1896 IN
THE SOUTH DIVISION.

| STREET | FROM | TO | Diam. in feet | Length in feet |
|-----------------------|-------------------------|-------------|---------------------|----------------------|
| Kimbark avenue | M. H. in Sixty-seventh | North..... | 9 | 42 |
| Thirty-seventh | Manhole in Honore... | West..... | 1 | 42 |
| Fifty-eighth | Manhole in Jackson .. | East | 9 | 85 |
| Fifty-eighth | M. H. in Ingleside ave. | West | 9 | 94 |
| Woodlawn avenue..... | M. H. in Sixty-seventh | North | 9 | 44 |
| Monroe avenue | M. H. in Sixty-seventh | North | 9 | 46 |
| Washington avenue.... | M. H. in Sixty-seventh | North | 9 | 40 |
| Sixtieth | Wabash avenue | West..... | 9 | 110 |
| Sixtieth | Wabash avenue | East | 9 | 110 |
| Sixtieth | Michigan avenue..... | East | 9 | 110 |
| Fifty-sixth | Wabash avenue | West..... | 9 | 100 |
| Fifty-sixth | Wabash avenue | East | 9 | 110 |
| Fifty-sixth | Michigan avenue | East | 9 | 120 |
| Total | | | | 1,053 |

RECEIPTS IN HOUSE DRAIN DEPARTMENT DURING
THE YEAR 1896.

| DIVISION. | PERMITS ISSUED. | | | | | | | | Receipts. |
|---|-----------------|---------|----------|----------|--------|------------|-------|-----------------|--------------|
| | 6-inch. | 9-inch. | 12-inch. | 15-inch. | Total. | Junctions. | | Special Ass'mt. | |
| | | | | | | 6-in. | 9-in. | | |
| West | 1,867 | 42 | 4 | ..... | 1,913 | 31 | 7 | 340 | 1 ,257 50 |
| North | 1,105 | 31 | ..... | ..... | 1,136 | 23 | 5 | 149 | 6,102 19 |
| South | 2,252 | 70 | 3 | 1 | 2,326 | 128 | 10 | 734 | 13,116 50 |
| Totals | 5,224 | 143 | 7 | 1 | 5,375 | 182 | 22 | 1,223 | \$ 29,476 19 |
| Receipts from licenses..... | | | | | | | | | 2,318 00 |
| Receipts from special assessments, etc..... | | | | | | | | | 24,165 59 |
| Total receipts | | | | | | | | | \$ 55,959 78 |

NUMBER OF HOUSE DRAINS PUT IN PLACE DURING THE YEAR 1896,
UNDER SPECIAL ASSESSMENT.

| DIVISION. | Total number of drains. | Total length of drains. | Total cost. | Average cost per drain. | Average length drain in feet. | Average cost per foot in cents. |
|-------------|-------------------------|-------------------------|--------------|-------------------------|-------------------------------|---------------------------------|
| South | 3,612 | 106,782 | \$ 15,322 66 | \$ 4 24 | 29.54 | 14.34 |
| West | 2,164 | 62,378 | 9,561 69 | 4 42 | 28.83 | 15.33 |
| North | 423 | 11,942 | 1,807 82 | 4 27 | 28.23 | 15.14 |
| Total | 6,199 | 181,102 | \$ 26,692 17 | \$ 4 31 | 29.22 | 14.74 |

Making a total of 34.3 miles of six (6) inch drains laid by contract and paid for by special assessment.

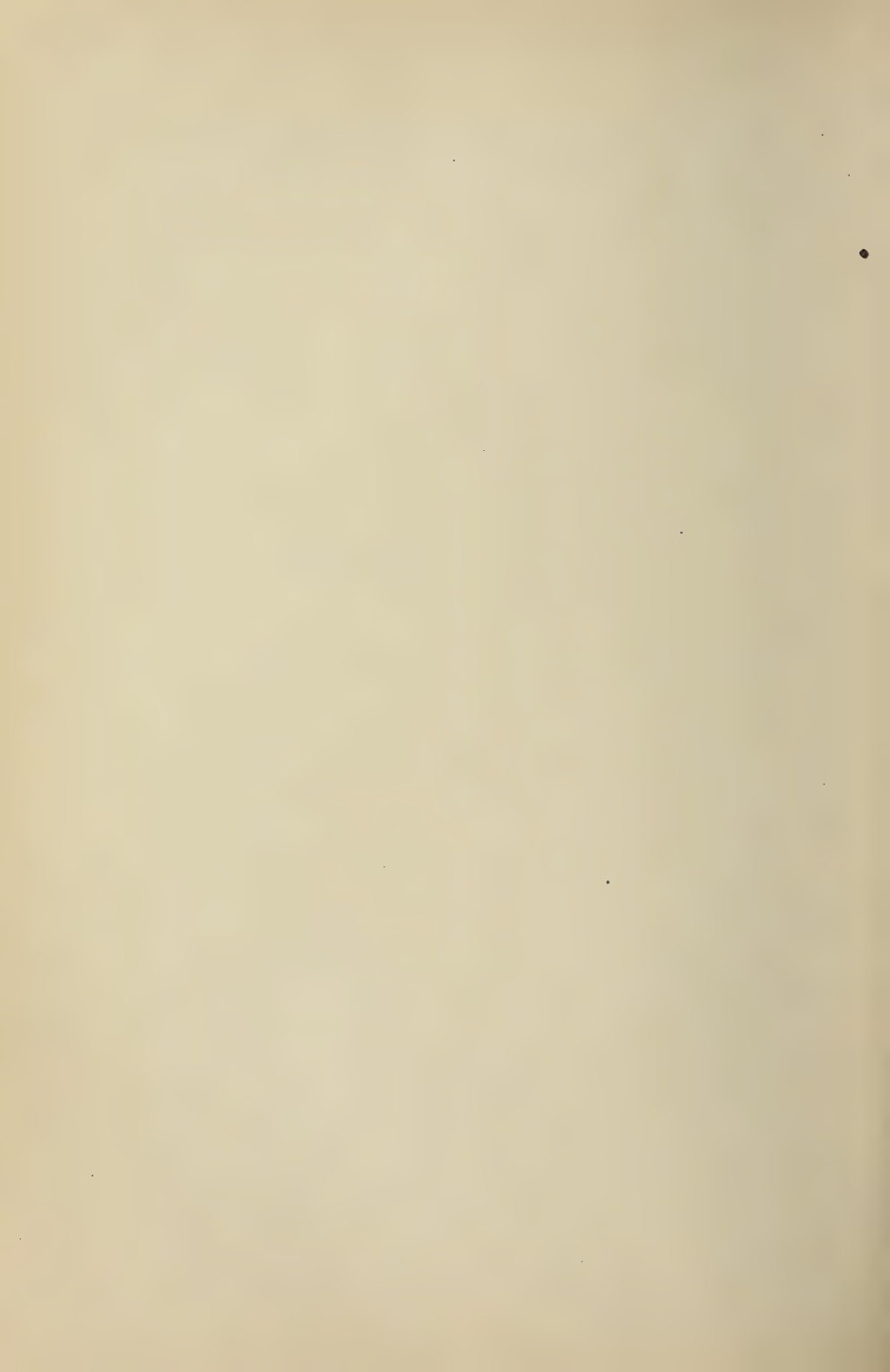
Respectfully submitted,

G. L. CLAUSEN,

Superintendent Bureau of Sewers.

REPORT OF THE
Bureau of Streets

CITY OF CHICAGO



BUREAU OF STREETS.

HON. JOSEPH DOWNEY,

Commissioner of Public Works.

DEAR SIR: I have the honor to submit herewith the Twenty-first Annual Report of the Bureau of Streets for year ending December 31, 1896.

A review of the work accomplished during the past year by the various departments of this Bureau is presented in detail; also information relative to the different railroads centering in this City, and extension of the various street railway lines operating within the corporation limits.

FINANCIAL STATEMENT.

| | |
|---|------------------------------|
| Amount paid contractors for street improvements by special assessments..... | \$1,712,305 21 |
| For sidewalks built by the Bureau under special assessment | 30,879 13 |
| For re-paving and repairing improved streets | 196,306 39 |
| For grading, ditching, building and repairing aprons, culverts, crossings, etc., on unimproved streets..... | 125,621 60 |
| For sidewalk general repairs, and intersections ... | 70,518 48 |
| For City parks | 12,299 73 |
| For new and repaired street lamps and signs..... | 52,712 90 |
| GRAND TOTAL..... | <u><u>\$2,200,643 44</u></u> |

STREET AND ALLEY IMPROVEMENTS.

In addition to attending to the work under construction twenty-one lettings were prepared and advertised, and contracts for thirty-five alleys and 203 streets awarded; seventy-nine surveys for the opening or widening of alleys and streets and seventy-one surveys showing obstructions upon the public highways were made, and 363 preliminary estimates for alley and street improvements were returned to Special Assessment Bureau, divided as follows:

| KINDS OF PAVEMENT. | Square Yards. | Lineal Feet. | Lineal Miles. | Estimated Cost. |
|---------------------|---------------|--------------|---------------|-----------------|
| Cedar block..... | 1,402,920 | 394,029 | 74.63 | \$2,301,466 90 |
| Brick..... | 175,855 | 51,103 | 9.68 | 435,147 99 |
| Asphalt..... | 300,253 | 88,165 | 16.70 | 808,612 21 |
| Macadam..... | 1,122,995 | 277,723 | 52.60 | 1,411,199 62 |
| Granite..... | 58,673 | 14,855 | 2.18 | 196,844 02 |
| Total for 1896..... | 3,060,696 | 825,844 | 156.42 | \$5,153,190 74 |
| “ “ 1895..... | 2,808,520 | 805,709 | 152.59 | 5,491,765 12 |

This increase of 252,176 square yards of paving estimated during 1896 over the amount estimated during 1895 is composed thus:

| | | |
|------------------|---------|------------------------|
| Cedar block..... | 339,144 | square yards decrease. |
| Brick..... | 147,711 | “ “ “ |
| Asphalt..... | 165,450 | “ “ increase. |
| Macadam..... | 548,615 | “ “ “ |
| Granite..... | 24,966 | “ “ “ |

Of the 82.65 miles of pavement laid during the year, cedar block was 53 per cent., asphalt 20.6 per cent., granite 4.2 per cent., macadam 16.5 per cent. and brick 5.7 per cent. By reference to the table on page 241 it will be seen that cedar block and macadam pavements are constantly diminishing, while granite, asphalt and brick are on the increase. This condition may not continue during the next year owing to the fact that the preliminary estimates for brick paving have decreased about 50 per cent., while those for macadam have had a like increase.

Notwithstanding that the engineering force of this Bureau was reduced one-fifth at the beginning of the year, I am pleased to report that the amount of work carried on during 1896 exceeds that of 1895 by 73 per cent., and as the Assistant Engineers in charge of improvements were personally accountable for the character of the work, better results were obtained than under previous methods.

The following tables show the progress of alley and street improvements, and the character of pavement laid :

ALLEYS IMPROVED

| NAME | FROM | BETWEEN | Commenced |
|-----------------------|--|--------------------------------------|----------------|
| Alley | May to Ann..... | Washington boulevard and Madison . | May 13, 1896 |
| Alley | Diller to Western avenue . | Kinzie and Fulton..... | June 4, 1896 |
| Alley | Kedzie ave. to alley west. | Washington blvd. and Warren ave . | Oct. 26, 1896 |
| Alley | Michigan ave. to 125 ft. E. | River and South Water... | May 21, 1896 |
| Alley | Michigan av. to Central av. | South Water and Lake .. | May 25, 1896 |
| Alley | Randolph N. to E. terminus | Market and Franklin | May 28, 1896 |
| Alley | 120 ft. E. of 5th av. to a point 86 ft. E. | Randolph and Washington | July 15, 1896 |
| Alley | Clark to Dearborn..... | Monroe and Adams..... | Aug. 15, 1896 |
| Alley | Sixteenth to Eighteenth.. | Michigan and Indiana avenues... | Aug. 26, 1896 |
| * Alley east and west | Johnson pl. to Iglehart pl. | Twenty-seventh and Twenty-eighth. | July 10, 1896 |
| Alley | Twenty-eighth to Swift pl. | Wentworth and 5th aves. . | May 5, 1896 |
| Alley | Whitehouse pl. to 31st . | Wentworth and 5th aves. . | May 2, 1896 |
| Alley | 42d to 43d | Wabash and Michigan avenues ... | Sept. 23, 1896 |
| Alley | Forty-fourth to Forty-fifth. | Berkeley and Greenwood avenues . | May 15, 1896 |
| Alley | Lake ave. to I. C. R. R. . | North of Fifty-third | Oct. 2, 1896 |
| Alley | Adams to Jackson..... | Desplaines and Jefferson... | Aug. 12, 1896 |
| Alley | Hamilton ave. to Leavitt. | Adams and Jackson blvd. . | Aug. 17, 1896 |
| Alley | Oakley ave. to 100 ft. W. . | Adams and Jackson blvd. . | Aug. 15, 1896 |
| Alleys, all | Adams to Jackson blvd. . | Central Pk. blvd. and St. Louis ave. | Oct. 13, 1896 |
| Alleys, all | Colorado av. to Jackson bd. | Albany ave. and Troy.... | Oct. 8, 1896 |
| Alley | Paulina to Congress. | Congress and Harrison... | April 11, 1896 |
| Alley | Kedzie av. to Homan av. . | Congress and Harrison... | Aug. 27, 1896 |
| Alley | Halsted to Desplaines. . | DeKoven and Bunker.... | Aug. 28, 1896 |
| Alleys, all | Flournoy to Lexington ... | Douglas boul. and Springfield ... | Aug. 13, 1896 |
| Alleys, all | Harrison to Flournoy ... | Campbell and Western avs. . | June 2, 1896 |
| Alleys, all | Jackson blvd. to VanBuren | Honore and Lincoln | May 9, 1896 |
| Alleys, all | Madison to Monroe..... | St. Louis and Homan avs. . | May 7, 1896 |
| Alleys, all | Madison to Monroe..... | St. Louis and Central Park avs. . | Dec. 1, 1895 |
| Alleys, all | Monroe to Adams..... | St. Louis and Homan avs. . | Dec. 1, 1895 |
| Alleys, all | Polk to Harvard..... | Albany and Kedzie aves. . | May 1, 1896 |
| Alleys, all | Twelfth to Maxwell..... | Morgan and Sangamon .. | Aug. 15, 1896 |
| Alleys, all | Van Buren to Congress. . | Centre ave. and Throop. . | Oct. 22, 1896 |
| * Alley | Fullerton av. to 190 ft. N. | Clark and Larrabee | Oct. 16, 1896 |
| Alley | Racine ave. to Seminary ave . | Wrightwood ave. and Seminary pl. | May 9, 1896 |
| * Alley | State to alley east | North ave. and Schiller... | April 22, 1896 |
| Alley | North ave. to Germania pl. | Clark and La Salle ave... | May 4, 1896 |
| Alley | First east of State | Division and Scott..... | May 1, 1896 |
| Alley | Osgood to Seminary ave. . | Garfield ave. and Center. . | May 4, 1896 |
| Alley | Orchard to Burling | Willow and North ave. | April 28, 1896 |
| Alley | Sheffield ave. to Osgood. . | Garfield ave. and Center. . | May 25, 1896 |
| Alley | Vine to Orchard..... | Willow and North ave. | June 19, 1896 |
| Alley | Franklin to Market..... | Superior and Huron | Sept. 1, 1896 |
| Alley | Ohio to Indiana | Wells and Franklin..... | Dec. 7, 1896 |

*Private Contract.

DURING 1896.

| Finished | CONTRACTOR | Nature of Improvement | Square Yards | Lineal Feet |
|---------------|-----------------------------|-----------------------|--------------|-------------|
| May 15, 1896 | R. F. Conway..... | Cedar | 304 | 162 |
| June 6, 1896 | Sackley & Peterson | " | 1,107 | 653 |
| Nov. 23, 1896 | Sackley & Peterson | Brick | 1,748 | 1,042 |
| May 27, 1896 | Gaffney & Long | Granite | 285 | 128 |
| May 27, 1896 | Sackley & Peterson | " | 174 | 130 |
| May 30, 1896 | Sackley & Peterson | " | 150 | 135 |
| July 16, 1896 | Dillon & Conlan.... | " | 172 | 86 |
| Aug. 27, 1896 | J. V. McAdam | Brick | 576 | 322 |
| Sept. 7, 1896 | Henry Rath..... | Cedar | 1,522 | 780 |
| July 20, 1896 | A. J. McBean & Co..... | " | 500 | 370 |
| May 8, 1896 | Garden City P. & P. Co..... | " | 770 | 462 |
| May 6, 1896 | Garden City P. & P. Co..... | " | 846 | 476 |
| Oct. 14, 1896 | R. F. Wilson..... | " | 1,290 | 591 |
| June 5, 1896 | Sackley & Peterson | " | 820 | 620 |
| Oct. 17, 1896 | Henry Rath..... | Brick..... | 222 | 131 |
| Sept. 1, 1896 | Henry Rath..... | Cedar..... | 773 | 387 |
| Sept. 3, 1896 | Naugle, Holcomb & Co..... | " | 778 | 454 |
| Oct. 14, 1896 | R. F. Wilson & Co..... | " | 176 | 100 |
| Nov. 9, 1896 | R. F. Conway..... | " | 1,344 | 637 |
| Oct. 23, 1896 | J. B. Smith & Co..... | " | 1,250 | 750 |
| May 9, 1896 | R. F. Conway..... | " | 600 | 315 |
| Oct. 14, 1896 | R. F. Wilson & Co..... | " | 2,309 | 1,385 |
| Oct. 20, 1896 | A. J. McBean & Co..... | " | 1,306 | 904 |
| Oct. 10, 1896 | Wilson & Thatcher | " | 1,240 | 744 |
| July 30, 1896 | Sackley & Peterson | " | 1,211 | 726 |
| May 22, 1896 | R. F. Conway..... | " | 903 | 653 |
| June 5, 1896 | R. F. Conway..... | " | 1,353 | 648 |
| June 10, 1896 | Sackley & Peterson | " | 1,547 | 733 |
| June 10, 1896 | Sackley & Peterson | " | 1,357 | 643 |
| July 30, 1896 | Sackley & Peterson | " | 1,204 | 725 |
| Oct. 14, 1896 | Wilson & Thatcher | " | 767 | 493 |
| Nov. 28, 1896 | A. J. McBean & Co..... | " | 1,929 | 1,240 |
| Oct. 18, 1896 | Garden City P. & P. Co..... | " | 430 | 192 |
| May 11, 1896 | Henry Rath..... | " | 978 | 595 |
| May 6, 1896 | Simpson Bros | Asphalt..... | 230 | 130 |
| May 5, 1896 | Henry Rath..... | Cedar..... | 474 | 227 |
| May 2, 1896 | Henry Rath..... | " | 524 | 269 |
| May 8, 1896 | Henry Rath..... | " | 1,254 | 724 |
| May 2, 1896 | Henry Rath..... | " | 2,741 | 1,171 |
| June 6, 1896 | Sackley & Peterson | " | 1,187 | 722 |
| June 22, 1896 | Henry Rath..... | " | 893 | 456 |
| Sept. 8, 1896 | Henry Rath..... | " | 618 | 325 |
| Dec. 12, 1896 | Henry Rath..... | " | 753 | 438 |

STREETS IMPROVED

| NAME | FROM | TO | Commenced |
|--------------------|--------------------|--------------------------|----------------|
| Ada | Fiftieth | Fifty-first | Sept. 3, 1896 |
| Adams | Halsted | Morgan | June 20, 1896 |
| *Adams | Hamlin avenue | Fortieth avenue | April 15, 1896 |
| Addison avenue | Sixty-ninth | Seventy-first | Oct. 8, 1896 |
| Alice place | Powell avenue | Perry avenue | April 18, 1896 |
| Arch | Archer avenue | Lyman | Jan. 15, 1896 |
| Ashland avenue | Fifty-ninth | Sixty-third | Oct. 20, 1895 |
| Attrill | Stave | Milwaukee avenue | Oct. 18, 1895 |
| Balmoral avenue | Ashland avenue | East Ravenswood Park | Nov. 8, 1895 |
| Berwyn avenue | Clark | Southport avenue | April 10, 1896 |
| Bingham | Armitage avenue | Cornelia | Oct. 18, 1895 |
| Birch | Robey | Kendall | Sept. 30, 1896 |
| Blue Island avenue | Harrison | Fifteenth place | June 1, 1896 |
| *Bradley place | Halsted | Rokeby | May 11, 1896 |
| *Byron | Robey | Leavitt | July 30, 1896 |
| Byron | Humboldt boulevard | California avenue | Sept. 9, 1895 |
| California avenue | Humboldt boulevard | Elston avenue | Aug. 1, 1896 |
| *Canal | Kinzie | Fulton | Oct. 26, 1896 |
| Carlisle place | Albany avenue | Kedzie avenue | March 1, 1896 |
| Carpenter | Huron | Chicago avenue | June 29, 1896 |
| Chaney | Point | East terminus | Oct. 18, 1895 |
| Cherry place | Powell avenue | Perry avenue | April 18, 1896 |
| Clara place | Western avenue | Perry avenue | April 18, 1896 |
| Clement avenue | South Park avenue | Seventieth | Mar. 26, 1896 |
| Clinton | Milwaukee avenue | 331 feet north | Oct. 14, 1896 |
| Collins | Albany avenue | Kedzie avenue | Mar. 1, 1896 |
| Commercial ave. | Paulina | Terra Cotta place | July 31, 1896 |
| Congress | Homan avenue | Central Park avenue | May 7, 1896 |
| Congress | Fortieth | Forty-sixth | May 12, 1896 |
| *Congress | Hamlin avenue | Fortieth avenue | April 15, 1896 |
| Congress Park | Van Buren | Harrison | May 1, 1896 |
| Conneaut avenue | Hoffman avenue | California avenue | Dec. 1, 1895 |
| Cornelia | Point | Milwaukee avenue | Oct. 18, 1895 |
| Cornelia | Halsted | Sheffield avenue | May 12, 1896 |
| Cornelia | Milwaukee avenue | Ashland avenue | Oct. 30, 1896 |
| Crossing | Paulina | C. & N.-W. Ry. | April 29, 1896 |
| Dearborn avenue | Burton place | Chicago avenue | Oct. 13, 1896 |
| Dickens avenue | Humboldt boulevard | California avenue | Sept. 9, 1895 |
| Diversey avenue | Kedzie avenue | Milwaukee avenue | May 18, 1896 |
| Division | Clark | Lake Shore drive | Unfinished... |
| Division | Milwaukee avenue | N. Branch Chicago river | July 24, 1896 |
| Dryer | Forty-seventh | Fifty-first | April 1, 1896 |
| *Dunning | Kimball avenue | Alley east of Spaulding | April 20, 1896 |
| Eagle | Desplaines | Union | Nov. 10, 1895 |
| Eagle | Halsted | Union | May 5, 1896 |
| E. Ravenswood Pk. | North Fifty-ninth | Claremont avenue | Nov. 8, 1895 |
| Eastwood avenue | Robey | Leavitt | June 13, 1896 |
| Edbrooke place | Western avenue | Perry avenue | April 18, 1896 |
| Elizabeth | Fiftieth | Fifty-first | Sept. 9, 1896 |
| Elizabeth | Lake | Randolph | July 8, 1896 |
| Elizabeth | Austin avenue | Kinzie | July 2, 1896 |
| Elizabeth | Lake | 170 ft. north of Carroll | July 20, 1896 |
| Ellis avenue | Forty-first | Forty-third | Aug. 14, 1896 |
| Ellis avenue | Forty-third | Forty-sixth | Oct. 12, 1895 |
| Elm | State | Lake Shore drive | Aug. 21, 1896 |
| Elston avenue | North avenue | Armitage avenue | June 1, 1896 |
| Elston avenue | North avenue | Milwaukee avenue | July 15, 1896 |

DURING 1896.

| Finished | CONTRACTOR | Nature of Improvement | Square Yards | Lineal Feet |
|----------------|-----------------------------|-----------------------|--------------|-------------|
| Oct. 5, 1896 | A. J. McBean & Co..... | Cedar | 2,635 | 624 |
| Aug. 31, 1896 | Sackley & Peterson | " | 3,189 | 1,223 |
| Sept. 25, 1896 | Western Paving Co | Asphalt..... | 3,882 | 1,294 |
| Dec. 20, 1896 | Assyrian Asphalt Co | " | 4,880 | 1,350 |
| Aug. 18, 1896 | R. F. Conway | Cedar | 1,800 | 540 |
| June 13, 1896 | Sackley & Peterson | Curb and fill | | 811 |
| May 15, 1896 | R. F. Conway | Brick | 5,167 | 1,453 |
| Aug. 31, 1896 | Naugle, Holcomb & Co..... | Cedar | 1,371 | 441 |
| May 26, 1896 | O. Vider | " | 4,367 | 1,310 |
| June 6, 1896 | Henry Rath | Macadam | 3,217 | 965 |
| Aug. 31, 1896 | Naugle, Holcomb & Co..... | Cedar | 4,996 | 1,183 |
| Nov. 28, 1896 | O. Vider | " | 2,204 | 522 |
| Aug. 19, 1896 | Henry Rath | " | 22,009 | 6,000 |
| June 14, 1896 | Minnehaha Granite Co | Macadam | 1,804 | 580 |
| Sept. 10, 1896 | Dolese & Shepard | Macadam | 4,000 | 1,200 |
| May 5, 1896 | Naugle, Holcomb & Co | Cedar | 3,617 | 1,085 |
| Dec. 9, 1896 | Naugle, Holcomb & Co | " | 15,360 | 3,664 |
| Unfinished... | Dillon & Conlon | Brick | 2,420 | 830 |
| Aug. 12, 1896 | Assyrian Asphalt Co | Asphalt | 1,991 | 664 |
| Aug. 15, 1896 | Chas. V. McAdam | Brick | 2,111 | 500 |
| Aug. 31, 1896 | Naugle, Holcomb & Co | Cedar | 683 | 220 |
| Aug. 18, 1896 | R. F. Conway | " | 1,806 | 542 |
| Aug. 18, 1896 | R. F. Conway | " | 3,268 | 980 |
| July 15, 1896 | C. M. Netterstrom | Brick | 5,510 | 1,590 |
| Oct. 26, 1896 | Sackley & Peterson | Cedar | 1,486 | 331 |
| Aug. 9, 1896 | Assyrian Asphalt Co | Asphalt | 1,957 | 652 |
| Aug. 9, 1896 | J. B. Smith & Co | Cedar | 2,723 | 772 |
| Oct. 1, 1896 | Standard Paving Co | Asphalt | 4,222 | 1,407 |
| Sept. 23, 1896 | Standard Paving Co | " | 12,882 | 4,335 |
| Sept. 25, 1896 | Western Paving Co | " | 4,443 | 1,290 |
| June 23, 1896 | White & Valentine | Curbing | | 730 |
| July 16, 1896 | R. F. Conway | Cedar | 4,372 | 1,311 |
| Aug. 31, 1896 | Naugle, Holcomb & Co | " | 3,567 | 844 |
| Nov. 3, 1896 | Henry Rath | Macadam | 5,650 | 1,338 |
| Nov. 18, 1896 | R. F. Conway | Cedar | 7,140 | 2,142 |
| June 22, 1896 | R. F. Conway | " | 1,950 | 462 |
| Oct. 31, 1896 | Barber Asphalt Paving Co .. | Asphalt | 20,000 | 5,000 |
| May 5, 1896 | Naugle, Holcomb & Co | Cedar | 1,110 | 333 |
| June 15, 1896 | O. Vider | " | 5,608 | 1,302 |
| ..... | Standard Paving Co | Curb and fill | | 1,575 |
| Sept. 12, 1896 | O. Vider | Cedar | 9,366 | 2,409 |
| June 27, 1896 | Sackley & Peterson | " | 11,248 | 2,664 |
| June 27, 1896 | Dolese & Shepard | Macadam | 1,633 | 490 |
| Mar. 19, 1896 | J. Conlan | Granite | 986 | 320 |
| May 22, 1896 | Gaffney & Long | " | 1,337 | 420 |
| May 26, 1896 | O. Vidder | Cedar | 6,666 | 2,000 |
| July 8, 1896 | J. B. Smith & Co | " | 4,395 | 1,364 |
| Aug. 18, 1896 | R. F. Conway | " | 3,297 | 989 |
| Oct. 5, 1896 | A. J. McBean & Co | " | 2,634 | 624 |
| July 25, 1896 | Standard Paving Co | Asphalt | 1,387 | 402 |
| Aug. 3, 1896 | A. J. McBean & Co | Cedar | 1,674 | 397 |
| Sept. 3, 1896 | R. F. Conway | " | 4,329 | 1,025 |
| Sept. 15, 1896 | Barber Asphalt Paving Co .. | Asphalt | 4,424 | 1,284 |
| May 14, 1896 | Sackley & Peterson | Macadam | 7,156 | 2,078 |
| Nov. 25, 1896 | Henry Rath | " | 4,438 | 993 |
| July 11, 1896 | Henry Rath | Cedar | 7,589 | 3,022 |
| Aug. 5, 1896 | R. F. Conway | " | 14,365 | 5,281 |

STREETS IMPROVED

| NAME | FROM | TO | Commenced |
|---------------------------|-----------------------------|--|----------------|
| Erie | Wells | N. branch Chicago river.. | Sept. 24, 1896 |
| Erie | Wells | State | Sept. 24, 1896 |
| Eugenie | Clark | Sedgwick | Aug. 21, 1896 |
| Evans avenue | Sixty-third | Sixty-seventh | Sept. 1, 1896 |
| Evergreen | Rockwell | California avenue | May 13, 1896 |
| Ewing avenue | Ninety-second | 102d | May 15, 1896 |
| Fairfield avenue | Sixteenth | Twenty-second | Nov. 1, 1895 |
| *Fairfield avenue | Cortland | Armitage avenue | June 3, 1896 |
| Falls | Madison | Warren avenue | May 27, 1896 |
| Farragut | Clark | Southport avenue | April 2, 1896 |
| *Fifth avenue | Van Buren | Chicago river | July 14, 1896 |
| Fortieth court | Park avenue | Randolph | July 6, 1896 |
| Forty-second ave | Lake | Twelfth | July 1, 1896 |
| Forty-second ave | North avenue | Humboldt avenue | June 8, 1896 |
| Forty-second ave | Berteau avenue | Grace avenue | Aug. 28, 1896 |
| Forty-fourth avenue | Armitage avenue | North avenue | June 30, 1896 |
| Forty-sixth | Ellis avenue | Greenwood avenue | Nov. 18, 1895 |
| Forty-seventh | Cottage Grove avenue | Drexel boulevard | Dec. 26, 1895 |
| Forty-eighth | Vincennes avenue | Grand boulevard | Nov. 11, 1895 |
| Forty-eighth | Vincennes avenue | St. Lawrence avenue | Nov. 20, 1895 |
| Fifty-fourth place | Union avenue | Wallace | Sept. 11, 1896 |
| Fifty-sixth | State | South Park avenue | Sept. 15, 1896 |
| Fifty-eighth | Cottage Grove avenue | Ellis avenue | June 28, 1896 |
| Fletcher | Racine avenue | Perry | Aug. 24, 1896 |
| Flournoy | Albany avenue | Central Park avenue | April 1, 1896 |
| Flournoy | Washtenaw avenue | California avenue | Jan. 1, 1896 |
| Frances place | Point | California avenue | Oct. 18, 1895 |
| Francis | Charlton | Southport avenue | April 21, 1896 |
| Francisco | Van Buren | Harrison | June 1, 1896 |
| Franklin | Van Buren | Charles place | Sept. 16, 1896 |
| *Fulton | Jefferson | Desplaines | July 1, 1896 |
| *Fulton, north ½ | Union | Desplaines | June 12, 1896 |
| *Gladys avenue | Fortieth avenue | Hamlin avenue | April 15, 1896 |
| Gladys avenue | Fortieth avenue | Forty-sixth avenue | April 20, 1896 |
| Grace | Southport avenue | Ashland avenue | Unfinished... |
| *Grace | Robey | Hamilton avenue | July 30, 1896 |
| Greenwood avenue | Hoffman avenue | California avenue | Dec. 1, 1895 |
| Groveland avenue | Twenty-ninth | Thirty-third | June 22, 1896 |
| Halsted | Archer avenue | 155 ft. S. of Twenty-fifth place | Aug. 10, 1896 |
| *Hamilton avenue | Irving Park boulevard | Grace | July 30, 1896 |
| *Hamlin avenue | Madison | Colorado avenue | April 15, 1896 |
| Harding avenue | Chicago avenue | Kinzie | May 4, 1896 |
| *Hawthorn place | Lake Shore drive | East terminus | May 1, 1896 |
| Henry court | Point | East terminus | Oct. 18, 1895 |
| Hinman avenue | Western avenue | Pan Handle Ry | June 1, 1896 |
| Howard avenue | North avenue | Humboldt avenue | Oct. 25, 1895 |
| *Hoyne avenue | Irving Park boulevard | Grace | July 30, 1896 |
| Humboldt | Cornelia | Division | Oct. 5, 1896 |
| Humboldt | Armitage avenue | Palmer avenue | Sept. 9, 1895 |
| Illinois | Wells | Clark | Sept. 26, 1895 |
| Indiana avenue | Fifty-first | Fifth-fifth | June 5, 1896 |
| Indiana | Monticello avenue | Crawford avenue | June 18, 1896 |
| Irving Park avenue | Halsted | Lake Michigan | Sept. 10, 1896 |
| Irving Park blvd | Robey | North Forty-eighth ave | Nov. 23, 1896 |
| Jackson avenue | P., Ft. W. & C. Ry | Seventy-fifth | Nov. 1, 1896 |
| *Jackson | Hamlin avenue | Fortieth avenue | April 16, 1896 |
| Jefferson avenue | Seventy-first | Seventy-third | April 6, 1896 |

DURING 1896—CONTINUED.

| Finished | CONTRACTOR | Nature of Improvement | Square Yards | Lineal Feet |
|------------------|-------------------------------|-----------------------|--------------|-------------|
| Oct. 24, 1896 | O Vider | Cedar | 7,884 | 2,435 |
| Oct. 24, 1896 | R. F. Conway | " | 6,693 | 1,478 |
| Oct. 7, 1896 | Sackley & Peterson | " | 5,699 | 1,598 |
| Oct. 15, 1896 | Barber Asphalt Paving Co. . . | Asphalt | 8,335 | 2,780 |
| Aug. 5, 1896 | Standard Paving Co | " | 3,940 | 1,214 |
| Dec. 24, 1896 | Naugle, Holcomb & Co | Cedar | 26,333 | 6,995 |
| Sept. 1, 1896 | R. F. Conway | " | 10,792 | 2,556 |
| June 29, 1896 | R. F. Wilson & Co. | " | 2,090 | 627 |
| June 27, 1896 | Sackley & Peterson | " | 1,164 | 306 |
| June 6, 1896 | Henry Rath | Macadam | 3,217 | 965 |
| Sept. 6, 1896 | Dillon & Conlon | Granite | 15,131 | 3,960 |
| Aug. 11, 1896 | Sackley & Peterson | Cedar | 1,828 | 420 |
| Sept. 23, 1896 | R. F. Conway | " | 29,351 | 7,096 |
| Aug. 31, 1896 | O. Vider | " | 16,774 | 3,975 |
| Unfinished . . . | J. Bairstow & Bro. | Macadam | 7,612 | 2,537 |
| Oct. 5, 1896 | J. B. Smith & Co | Cedar | 6,826 | 1,365 |
| May 19, 1896 | Sackley & Peterson | Macadam | 2,338 | 658 |
| May 25, 1896 | Talbot Paving Co. | Cedar | 1,643 | 570 |
| May 14, 1896 | C. M. Netterstrom | Brick | 2,320 | 614 |
| June 15, 1896 | J. Bairstow | Macadam | 2,356 | 624 |
| Oct. 8, 1896 | Garden City P. & P. Co | Cedar | 2,576 | 610 |
| Dec. 10, 1896 | R. Wilson & Co | " | 9,040 | 2,600 |
| Oct. 6, 1896 | Gaffney & Long | Macadam | 4,679 | 1,135 |
| Nov. 21, 1896 | O. Vider | Cedar | 7,626 | 1,806 |
| Aug. 3, 1896 | Bermudez Asphalt Paving Co. | Asphalt | 10,223 | 3,408 |
| Sept. 3, 1896 | R. F. Conway | Cedar | 2,364 | 709 |
| Aug. 31, 1896 | Naugle, Holcomb & Co | " | 1,469 | 441 |
| Aug. 10, 1896 | J. Bairstow | Macadam | 3,267 | 980 |
| Oct. 8, 1896 | R. F. Conway | Cedar | 2,831 | 675 |
| Nov. 4, 1896 | R. F. Conway | Brick | 2,109 | 578 |
| July 23, 1896 | Gaffney & Long | Granite | 1,710 | 320 |
| June 27, 1896 | Gaffney & Long | " | 850 | 319 |
| Sept. 25, 1886 | Western Paving Co | Asphalt | 3,876 | 1,292 |
| Sept. 11, 1896 | Bermudez Asphalt Paving Co. | " | 12,180 | 4,060 |
| ..... | Harry Rath | Curbing ..... | ..... | 1,242 |
| Sept. 10, 1896 | Dolese & Shepard | Macadam | 3,800 | 900 |
| July 16, 1896 | R. F. Conway | Cedar | 4,014 | 1,204 |
| Sept. 14, 1896 | R. F. Conway | Brick | 10,983 | 2,593 |
| Sept. 26, 1896 | R. F. Conway | Cedar | 1,686 | 562 |
| Sept. 10, 1896 | Dolese & Shepard | Macadam | 4,333 | 1,300 |
| Sept. 25, 1896 | Western Paving & Supply Co. | Asphalt | 6,399 | 2,304 |
| Aug. 17, 1896 | A. Jaicks | " | 7,992 | 2,664 |
| June 1, 1896 | Dolese & Shepard | Macadam | 533 | 160 |
| Aug. 31, 1896 | Naugle, Holcomb & Co | Cedar | 713 | 214 |
| Dec. 16, 1896 | Henry Rath | " | 2,230 | 530 |
| May 8, 1896 | O. Vider | " | 15,143 | 3,589 |
| Sept. 10, 1896 | Dolese & Shepard | Macadam | 4,333 | 1,300 |
| Nov. 17, 1896 | Bermudez Asphalt Paving Co. | Asphalt | 6,498 | 1,950 |
| May 5, 1896 | Naugle, Holcomb & Co | Cedar | 2,244 | 673 |
| May 6, 1896 | Farley & Green | Brick | 2,390 | 717 |
| July 11, 1896 | Garden City P. & P. Co | Cedar | 14,792 | 2,663 |
| June 25, 1896 | R. F. Conway | " | 7,811 | 2,343 |
| Oct. 15, 1896 | R. F. Wilson & Co. | Macadam | 3,673 | 870 |
| Unfinished . . . | J. Bairstow & Bro. | Filling ..... | ..... | 10,560 |
| Unfinished . . . | R. F. Conway | Macadam | 5,800 | 1,400 |
| Sept. 26, 1896 | Western P. & S. Co | Asphalt | 4,445 | 1,291 |
| Sept. 26, 1896 | Dolese & Shepard | Macadam | 3,83 | 1,142 |

STREETS IMPROVED

| NAME | FROM | TO | Commenced |
|-------------------------|---------------------------|----------------------------|----------------|
| Jefferson court . . . | Western avenue | Perry avenue | April 18, 1896 |
| Jefferson | Van Buren | Harrison | June 1, 1896 |
| Jefferson | Randolph | Madison | May 18, 1896 |
| *Jefferson | Fulton | Carroll avenue | Sept. 28, 1896 |
| *Jefferson | Kinzie | Grand avenue | Nov. 9, 1896 |
| Julia court | State | West terminus | Oct. 18, 1895 |
| *Junior terrace | Halsted | Hazel | June 25, 1896 |
| Justine | Forty-ninth | Fifty-first | May 20, 1896 |
| Kedzie avenue | Milwaukee avenue | Belmont avenue | June 30, 1896 |
| Keefe avenue | Clement avenue | South Chicago avenue . . | Mar. 26, 1896 |
| *Kenmore avenue . . . | Lawrence avenue | Sunnyside avenue | June 15, 1896 |
| *Kimball avenue . . . | Fullerton avenue | Wrightwood avenue . . . | July 20, 1896 |
| Lafin | Forty-ninth | Fifty first | Aug. 13, 1896 |
| Lake | Homan avenue | Crawford avenue | April 22, 1896 |
| La Salle avenue . . . | Chicago avenue | Illinois | April 8, 1896 |
| La Salle | Sixty-first | Sixty-third | Oct. 24, 1895 |
| Laurel avenue | Fullerton avenue | Diversey avenue | Dec. 1, 1895 |
| Leavitt | Ogden avenue | Twelfth | Aug. 1, 1896 |
| *Leavitt | Irving Park boulevard . . | Byron | July 30, 1896 |
| *Leland | Racine avenue | Sheridan road | June 15, 1896 |
| Le Moynes | Leavitt | California avenue | Sept. 16, 1896 |
| Lincoln | Armitage avenue | Asylum place | Oct. 17, 1896 |
| Lincoln | Thirty-fifth | Thirty-eighth | May 25, 1896 |
| Linden avenue | Humboldt boulevard . . . | Diversey avenue | Aug. 1, 1896 |
| Lunt avenue | Ridge avenue | Lake Michigan | May 23, 1896 |
| Madison avenue | Sixty-seventh | Seventy-fifth | July 1, 1896 |
| Madison | Paulina | Centre avenue | June 24, 1896 |
| Madison | Jefferson | Canal | Aug. 1, 1896 |
| Madison | Paulina | Western avenue | Oct. 14, 1896 |
| Madison | Canal | Viaduct | Aug. 1, 1896 |
| Madison | Viaduct | S. Branch Chicago river . | Aug. 1, 1896 |
| Marshfield avenue . . | Lincoln avenue | Cornelia | May 21, 1896 |
| May | Fifty-ninth | Sixty-third | April 29, 1896 |
| Mead | Fullerton avenue | Wrightwood avenue . . . | Aug. 10, 1895 |
| Melrose | Lake Shore drive | East terminus | July 20, 1896 |
| Michigan | Wells | Clark | Oct. 12, 1896 |
| Milwaukee avenue . . | Chicago avenue | Ashland avenue | Sept. 24, 1895 |
| Moffat | Western avenue | Rockwell | May 3, 1896 |
| *Monroe | Hamlin avenue | Fortieth avenue | April 15, 1896 |
| Moore | Wood | Pan Handle Ry | Jan. 2, 1896 |
| Mozart | Armitage avenue | Palmer avenue | Sept. 9, 1895 |
| Myrtle avenue | Milwaukee avenue | Diversey avenue | Dec. 1, 1895 |
| Newport avenue . . . | Lincoln avenue | East Ravenswood Park . . | May 29, 1896 |
| Nineteenth place . . . | May | Fisk | June 1, 1896 |
| Ninety-first | Exchange avenue | Green Bay avenue | May 5, 1896 |
| North avenue | Ashland avenue | N. Branch Chicago river . | Oct. 20, 1896 |
| North Fifty-ninth . . | Clark | Southport avenue | April 10, 1896 |
| North Fifty-ninth . . | East Ravenswood Park . . | Robey | Oct. 3, 1895 |
| Nutt avenue | Seventy-first | Seventy-third | April 6, 1896 |
| Oak | Wells | Clark | May 14, 1896 |
| Oakenwald avenue . . | Forty-third | Forty-fourth | April 13, 1896 |
| Oglesby avenue . . . | Sixty-ninth | Seventy-first | Oct. 8, 1896 |
| Ohio | Wells | Orleans | June 5, 1896 |
| Olga | Waveland avenue | Grace | May 27, 1896 |
| Ontario | Wells | Clark | June 15, 1896 |
| Otto | Ashland avenue | C. E. & L. S. R. R. . . . | June 1, 1896 |
| Park avenue | Fortieth avenue | Forty-sixth avenue | Oct. 19, 1896 |

DURING 1896—CONTINUED.

| Finished | CONTRACTOR | Nature of Improvement | Square Yards | Lineal Feet |
|----------------|-----------------------------|-----------------------|--------------|-------------|
| Aug. 18, 1896 | R. F. Conway..... | Cedar | 3,284 | 985 |
| Sept. 28, 1896 | Jas. Conlan | Granite | 3,757 | 829 |
| June 29, 1896 | Jas. Conlan | " | 3,921 | 870 |
| Oct. 15, 1896 | Gaffney & Long | " | 2,742 | 454 |
| Nov. 23, 1896 | Garden City P. & P. Co..... | Cedar | 3,040 | 720 |
| Aug. 31, 1896 | Naugle, Holcomb & Co..... | " | 727 | 218 |
| June 30, 1896 | Brownell Improvement Co.. | Macadam | 1,850 | 555 |
| Oct. 25, 1896 | Wilson & Thatcher | Cedar | 5,519 | 1,307 |
| Aug. 30, 1896 | Sackley & Peterson | " | 16,037 | 3,800 |
| July 15, 1896 | C. M. Netterstrom..... | Brick | 1,722 | 505 |
| July 31, 1896 | O. C. Simonds | Macadam | 5,716 | 1,874 |
| Aug. 10, 1896 | Kimball & Cobb Stone Co.. | " | 4,067 | 1,220 |
| Oct. 12, 1896 | A. J. McBean & Co..... | Cedar | 5,678 | 1,345 |
| June 27, 1896 | R. F. Conway..... | " | 8,185 | 2,715 |
| May 20, 1896 | A. J. McBean & Co..... | " | 9,425 | 2,192 |
| Jan. 4, 1896 | Henry Rath..... | Macadam | 1,813 | 544 |
| July 16, 1896 | R. F. Conway..... | Cedar | 7,915 | 2,375 |
| Sept. 7, 1896 | R. F. Conway..... | " | 2,880 | 682 |
| Sept. 10, 1896 | Dolese & Shepard | Macadam | 2,533 | 600 |
| July 31, 1896 | O. C. Simonds | " | 4,206 | 1,153 |
| Oct. 20, 1896 | Sackley & Peterson | Cedar | 11,393 | 3,940 |
| Nov. 28, 1896 | Sackley & Peterson | " | 5,211 | 1,234 |
| June 20, 1896 | R. F. Wilson..... | " | 8,531 | 2,020 |
| Dec. 9, 1896 | Naugle, Holcomb & Co.... | " | 4,712 | 1,116 |
| Aug. 3, 1896 | J. B. Smith & Co. | " | 27,232 | 6,127 |
| Nov. 5, 1896 | A. J. McBean & Co..... | Macadam | 20,910 | 5,348 |
| Aug. 11, 1896 | Barber Asphalt Paving Co.. | Asphalt..... | 12,169 | 3,319 |
| Sept. 9, 1896 | Barber Asphalt Paving Co.. | " | 3,051 | 858 |
| Nov. 9, 1896 | Barber Asphalt Paving Co.. | " | 5,227 | 1,483 |
| Aug. 17, 1896 | Gaffney & Long | Granite | 901 | 250 |
| Aug. 17, 1896 | Gaffney & Long | Oak blocks | 383 | 137 |
| Aug. 20, 1896 | R. F. Conway..... | Cedar | 4,021 | 1,206 |
| June 17, 1896 | R. F. Conway..... | " | 10,707 | 2,536 |
| July 18, 1896 | O. Vider | " | 5,605 | 1,328 |
| July 22, 1896 | Dolese & Shepard | Macadam | 610 | 183 |
| Nov. 19, 1896 | R. F. Conway..... | Granite | 3,961 | 768 |
| May 5, 1896 | Talbot Paving Co..... | Cedar | 14,150 | 4,932 |
| June 3, 1896 | J. B. Smith & Co..... | " | 5,095 | 1,207 |
| Sept. 25, 1896 | Western Paving & Supply Co. | Asphalt..... | 3,912 | 1,304 |
| June 21, 1896 | R. F. Conway..... | Cedar | 16,972 | 4,145 |
| May 5, 1896 | Naugle, Holcomb & Co..... | " | 2,244 | 672 |
| July 16, 1896 | R. F. Conway..... | " | 13,070 | 3,921 |
| June 30, 1896 | Sackley & Peterson | " | 1,792 | 448 |
| Sept. 29, 1896 | R. F. Conway..... | " | 1,206 | 388 |
| Oct. 20, 1896 | H. Heinson..... | " | 10,388 | 2,977 |
| Nov. 19, 1896 | J. B. Smith & Co..... | " | 7,415 | 2,938 |
| June 6, 1896 | Henry Rath..... | Macadam | 3,217 | 965 |
| May 2, 1896 | Henry Rath..... | Cedar | 6,334 | 1,500 |
| Sept. 26, 1896 | Dolese & Shepard | Macadam | 3,833 | 1,135 |
| May 23, 1896 | Garden City P. & P. Co.... | Cedar | 2,728 | 738 |
| May 22, 1896 | Assyrian Asphalt Co..... | Asphalt..... | 3,380 | 950 |
| Dec. 20, 1896 | Assyrian Asphalt Co..... | " | 4,420 | 1,300 |
| July 4, 1896 | Henry Rath..... | Cedar | 3,229 | 673 |
| Aug. 10, 1896 | Garden City P. & P. Co.... | " | 2,500 | 703 |
| June 30, 1896 | R. F. Wilson..... | " | 2,276 | 681 |
| July 18, 1896 | Sackley & Peterson | " | 10,072 | 2,385 |
| Dec. 19, 1896 | Bermudez Asphalt Paving Co. | Asphalt..... | 17,630 | 3,960 |

STREETS IMPROVED

| NAME | FROM | TO | Commenced |
|-------------------------|---------------------------|----------------------------|----------------|
| Paulina | Graceland avenue | Berteau avenue | June 15, 1896 |
| Paulina | Lincoln avenue | Cornelia | Oct. 26, 1896 |
| Pearl | Webster avenue | Garfield avenue | Aug. 4, 1896 |
| Peck court | State | Michigan avenue | May 1, 1896 |
| Pine | Chicago avenue | Indiana | Oct. 21, 1896 |
| Pive Grove avenue | Irving Park avenue | 180 feet north of Byron .. | Oct. 21, 1896 |
| Pleasant place | Western avenue | Perry avenue | April 18, 1896 |
| Point | Armitage avenue | California avenue | Oct. 18, 1895 |
| Polk | Ogden avenue | Western avenue | Oct. 24, 1896 |
| Prairie avenue | Twenty-second | Twenty-fifth | Sept. 15, 1896 |
| Prindiville | Stave | Milwaukee avenue | Oct. 18, 1895 |
| Rascher avenue | Ashland avenue | East Ravenswood Park .. | Nov. 8, 1895 |
| River | Michigan avenue | 250 feet east | July 15, 1896 |
| Rockwell | Ogden avenue | Sixteenth | Aug. 30, 1895 |
| *Rockwell | Ogden avenue | Washburn avenue | Aug. 1, 1896 |
| *Roscoe | Lake Shore drive | East terminus | May 1, 1896 |
| Rush | Ohio | Chicago river | May 28, 1896 |
| St. George court .. | Stave | Milwaukee avenue | Oct. 18, 1895 |
| St. Helen | Stave | West terminus | Oct. 18, 1895 |
| St. Louis avenue .. | Ogden avenue | Twenty-sixth | April 5, 1896 |
| St. Louis avenue .. | Madison | Colorado avenue | June 10, 1896 |
| St. Lawrence ave .. | Sixty-third | South Chicago avenue .. | Nov. 1, 1895 |
| St. Mary | Stave | West terminus | Oct. 18, 1895 |
| *Seelye avenue | Irving Park boulevard .. | Grace | July 30, 1896 |
| Seminary avenue .. | Newport avenue | Eddy | Aug. 19, 1896 |
| Sheldon | Madison | Washington boulevard .. | Oct. 17, 1896 |
| Sheridan road | North Fifty-ninth | Bryn Mawr avenue | Unfinished... |
| Sixteenth | Albany avenue | Kedzie avenue | Mar. 1, 1896 |
| Sixtieth | State | South Park avenue | July 15, 1896 |
| Sixty-second | Madison avenue | I. C. R. R. | July 26, 1896 |
| Sixty-fifth | State | C., R. I. & P. Ry. | April 23, 1896 |
| Sixty-seventh | South Park avenue | Stony Island avenue | Oct. 20, 1895 |
| Sixty-ninth | South Park avenue | Clement avenue | Mar. 26, 1896 |
| Sixty-ninth | Woodlawn avenue | I. C. R. R. | Oct. 8, 1896 |
| Seventieth | Addison avenue | I. C. R. R. | Oct. 8, 1896 |
| Seventy-first | Woodlawn avenue | I. C. R. R. | Oct. 8, 1896 |
| Seventy-first | South Park avenue | Cottage Grove avenue .. | Nov. 1, 1895 |
| Seventy-first | I. C. R. R. | Stony Island avenue | April 6, 1896 |
| Seventy-first place .. | I. C. R. R. | Stony Island avenue | April 6, 1896 |
| Seventy-second | I. C. R. R. | Stony Island avenue | April 6, 1896 |
| Seventy-second pl .. | I. C. R. R. | Stony Island avenue | April 6, 1896 |
| Seventy-third | Rhodes avenue | Cottage Grove avenue .. | Nov. 1, 1896 |
| Seventy-fourth | St. Lawrence avenue | Jackson avenue | Nov. 1, 1896 |
| South Chicago ave .. | South Park avenue | Seventy-fifth | June 1, 1896 |
| South Park avenue .. | Twenty-fourth | Thirty-fifth | July 27, 1896 |
| South Park avenue .. | Sixtieth | Sixty-third | June 1, 1896 |
| South Park avenue .. | Sixty-third | Sixty-seventh | May 10, 1896 |
| Southport avenue .. | North fifty-ninth | Balmoral avenue | April 10, 1896 |
| *Spaulding avenue .. | Fullerton avenue | Wrightwood avenue | April 20, 1896 |
| Springfield avenue .. | Madison | Colorado avenue | April 15, 1896 |
| State | Sixty-eighth | Seventy-fifth | Jan. 22, 1896 |
| Stave | California avenue | Armitage avenue | Oct. 18, 1895 |
| *Stratford place | Lake Shore drive | East terminus | May 1, 1896 |
| Summerdale ave | Clark | Southport avenue | April 10, 1896 |
| *Sunnyside avenue .. | Clark | Alley east of Dover | July 21, 1896 |
| *Sunnyside avenue .. | Evanston avenue | Sheridan road | June 15, 1896 |
| Superior | Clark | State | July 17, 1896 |

DURING 1896—CONTINUED.

| Finished | CONTRACTOR | Nature of Improvement | Square Yards | Lineal Feet |
|------------------|------------------------------|-----------------------|--------------|-------------|
| Oct. 5, 1896 | Sackley & Peterson | Brick | 4,702 | 1,322 |
| Nov. 25, 1896 | J. B. Smith & Co. | " | 1,883 | 628 |
| Sept. 21, 1896 | A. J. McBean & Co. | Cedar | 1,544 | 632 |
| May 25, 1896 | Geo. Powell | Brick | 3,100 | 934 |
| Dec. 12, 1896 | Henry Rath | Macadam | 6,510 | 1,953 |
| Nov. 9, 1896 | Henry Rath | " | 1,858 | 380 |
| Aug. 18, 1896 | R. F. Conway | Cedar | 3,295 | 989 |
| Aug. 31, 1896 | Naugle, Holcomb & Co. | " | 4,548 | 1,079 |
| Nov. 17, 1896 | R. F. Conway | " | 9,978 | 2,363 |
| Oct. 21, 1896 | Assyrian Asphalt Co. | Asphalt | 8,754 | 2,073 |
| Aug. 31, 1896 | Naugle, Holcomb & Co. | Cedar | 1,332 | 428 |
| May 26, 1896 | O. Vider | " | 4,367 | 1,310 |
| July 30, 1896 | Powell Bros. | Granite | 864 | 262 |
| Aug. 19, 1896 | Sackley & Peterson | Cedar | 5,348 | 1,267 |
| Oct. 17, 1896 | B. Harrington | " | 800 | 200 |
| June 1, 1896 | Dolese & Shepard | Macadam | 600 | 180 |
| July 15, 1896 | Sackley & Peterson | Granite | 5,652 | 1,364 |
| Aug. 31, 1896 | Naugle, Holcomb & Co. | Cedar | 1,409 | 423 |
| Aug. 31, 1896 | Naugle, Holcomb & Co. | " | 678 | 218 |
| July 24, 1896 | Trinidad Asphalt R. Co. | Asphalt | 12,007 | 4,002 |
| Aug. 21, 1896 | Assyrian Asphalt Co. | " | 6,028 | 1,428 |
| May 25, 1896 | Garden City P. & P. Co. | Cedar | 16,991 | 3,914 |
| Aug. 31, 1896 | Naugle, Holcomb & Co. | " | 678 | 218 |
| Sept. 10, 1896 | Dolese & Shepard | Macadam | 4,333 | 1,300 |
| Sept. 8, 1896 | Sackley & Peterson | Cedar | 2,356 | 558 |
| Oct. 27, 1896 | Sackley & Peterson | " | 1,857 | 440 |
| ..... | J. Bairstow & Bro. | Curb and fill ..... | ..... | 2,600 |
| Aug. 21, 1896 | Assyrian Asphalt Co. | Asphalt | 1,956 | 652 |
| Nov. 25, 1896 | C. M. Netterstrom | Macadam | 7,897 | 2,511 |
| Sept. 26, 1896 | Sackley & Peterson | " | 1,061 | 312 |
| May 22, 1896 | J. B. Smith & Co. | Cedar | 4,181 | 1,254 |
| June 24, 1896 | Naugle, Holcomb & Co. | " | 23,280 | 8,059 |
| July 15, 1896 | C. M. Netterstrom | Brick | 1,377 | 466 |
| Dec. 20, 1896 | Assyrian Asphalt Co. | Asphalt | 2,132 | 750 |
| Dec. 20, 1896 | Assyrian Asphalt Co. | " | 1,160 | 400 |
| Dec. 20, 1896 | Assyrian Asphalt Co. | " | 1,640 | 550 |
| Oct. 10, 1896 | H. Hiensen | Macadam | 6,730 | 2,245 |
| Sept. 26, 1896 | Dolese & Shepard | " | 4,529 | 1,297 |
| Sept. 26, 1896 | Dolese & Shepard | " | 5,922 | 1,786 |
| Sept. 26, 1896 | Dolese & Shepard | " | 6,619 | 1,894 |
| Sept. 26, 1896 | Dolese & Shepard | " | 6,631 | 1,911 |
| Unfinished | R. F. Conway | " | 4,000 | 1,200 |
| Unfinished | R. F. Conway | " | 4,000 | 1,200 |
| Unfinished | Talbot Paving Co. | Brick | 30,750 | 5,659 |
| Oct. 15, 1896 | Assyrian Asphalt Co. | Asphalt | 26,150 | 6,724 |
| Oct. 20, 1896 | Sackey & Paterson | Macadam | 4,995 | 2,286 |
| Sept. 15, 1896 | Barber Asphalt Paving Co. .. | Asphalt | 7,940 | 2,634 |
| June 6, 1896 | Henry Rath | Macadam | 4,832 | 1,450 |
| June 27, 1896 | Dolese & Shepard | " | 4,333 | 1,300 |
| Sept. 25, 1896 | Western P. & S. Co. | Asphalt | 8,548 | 2,518 |
| Dec. 13, 1896 | C. M. Netterstorm | Macadam | 26,089 | 4,892 |
| Aug. 31, 1896 | Naugle, Holcomb & Co. | Cedar | 8,699 | 2,062 |
| June 1, 1896 | Dolese & Shepard | Macadam | 440 | 110 |
| June 6, 1896 | Henry Rath | " | 3,217 | 965 |
| July 26, 1896 | O. C. Simonds | " | 1,827 | 514 |
| July 31, 1896 | O. C. Simonds | " | 1,312 | 359 |
| Aug. 18, 1896 | R. F. Conway | Cedar | 3,140 | 740 |

STREETS IMPROVED

| NAME | FROM | TO | Commenced |
|--------------------------|----------------------------|---------------------------|----------------|
| Swift | Francis | Ridge avenue | April 21, 1896 |
| Thomas | Wood | Leavitt | Oct. 23, 1896 |
| Turner avenue | Twelfth | Douglas boulevard | Aug. 10, 1896 |
| Twentieth place | Peoria | Sangamon | Aug. 12, 1896 |
| *Twenty-second | St. Louis avenue | Trumbull avenue | April 1, 1896 |
| Twenty-third | Homan avenue | Central Park avenue | May 25, 1896 |
| Twenty-third place | Hoyne avenue | Oakley avenue | Oct. 25, 1896 |
| Twenty-fourth | Wabash avenue | Michigan avenue | July 9, 1896 |
| Twenty-seventh | Cottage Grove avenue | I. C. R. R. | May 4, 1896 |
| *Twenty-eighth | Cottage Grove avenue | Groveland avenue | July 10, 1896 |
| Thirty-third | Ashland avenue | Archer avenue | Nov. 11, 1895 |
| *Van Buren | Hamlin avenue | Fortieth avenue | April 15, 1896 |
| Vernon avenue | Sixty-ninth | Seventy-third | Mar. 26, 1896 |
| Victor | Evanston avenue | Swift | April 21, 1896 |
| Wabansia avenue | Western avenue | Kedzie avenue | July 1, 1896 |
| *Wabash avenue | Lake | Harrison | May 1, 1896 |
| Wabash avenue | Sixty-sixth | Seventy-first | Sept. 10, 1895 |
| Warren avenue | Homan avenue | Falls | Oct. 16, 1896 |
| Warren avenue | Leavitt | Ogden avenue | Sept. 19, 1896 |
| Washington | Desplaines | Canal | Oct. 12, 1896 |
| Washington | Water | Canal | Sept. 25, 1896 |
| Washtenaw ave | Washington boulevard | Jackson boulevard | Sept. 16, 1896 |
| Water | St. Clair | 160 feet east | May 27, 1896 |
| Wellington avenue | Lincoln avenue | Perry avenue | June 8, 1896 |
| *Wentworth avenue | Twenty-first | Thirty-ninth | Aug. 3, 1896 |
| *Wilcox avenue | Hamlin avenue | Fortieth avenue | April 15, 1896 |
| *Wilson avenue | Robey | Leavitt | June 13, 1896 |
| *Wilson avenue | Racine avenue | Sheridan road | June 15, 1896 |
| *Winthrop avenue | Lawrence avenue | Kenmore avenue | June 15, 1896 |
| Wisconsin | Clark | Sedgwick | July 6, 1896 |
| Wright | North Fifty-ninth | Claremont avenue | Nov. 8, 1895 |
| *Wrightwood ave | Kimball avenue | Central Park avenue | Oct. 18, 1896 |

* Private Contract.

DURING 1896—CONTINUED.

| Finished | CONTRACTOR | Nature of Improvement | Square Yards | Lineal Feet |
|----------------|------------------------------|-----------------------|--------------|-------------|
| Aug. 10, 1896 | J. Bairstow..... | Macadam..... | 2,766 | 880 |
| Unfinished... | R. F. Conway..... | Cedar..... | 9,925 | 2,595 |
| Oct. 21, 1896 | Barber Asphalt Paving Co.... | Asphalt..... | 3,731 | 1,244 |
| Nov. 7, 1896 | A. J. McBean & Co..... | Cedar..... | 1,115 | 358 |
| Aug. 4, 1896 | R. F. Conway..... | "..... | 1,484 | 700 |
| Aug. 20, 1896 | A. J. McBean & Co..... | Macadam..... | 3,834 | 1,150 |
| Nov. 16, 1896 | R. F. Conway..... | Curb wall..... | ..... | 500 |
| July 31, 1896 | R. F. Conway..... | Cedar..... | 1,716 | 404 |
| June 11, 1896 | Dillon & Conlan..... | Granite..... | 2,110 | 680 |
| July 20, 1896 | A. J. McBean & Co..... | Cedar..... | 787 | 300 |
| May 19, 1896 | Naugle, Holcomb & Co..... | "..... | 6,116 | 1,450 |
| Sept. 25, 1896 | Western P. & S. Co..... | Asphalt..... | 3,891 | 1,297 |
| July 15, 1896 | C. M. Netterstrom..... | Brick..... | 9,297 | 2,780 |
| Aug. 10, 1896 | J. Bairstow..... | Macadam..... | 2,940 | 882 |
| Oct. 22, 1896 | Sackley & Peterson..... | Cedar..... | 14,606 | 4,382 |
| July, 18, 1896 | Dillon & Conlan..... | Granite..... | 21,511 | 4,486 |
| Nov. 25, 1896 | Mexican Asphalt Co..... | Asphalt..... | 11,583 | 3,295 |
| Unfinished.... | Assyrian Asphalt Co..... | "..... | 16,921 | 5,220 |
| Oct. 12, 1896 | Barber Asphalt Paving Co.... | "..... | 15,643 | 3,705 |
| Nov. 19, 1896 | R. F. Conway..... | Granite..... | 3,848 | 1,196 |
| Oct. 6, 1896 | Sackley & Peterson..... | "..... | 767 | 190 |
| Oct. 16, 1896 | R. F. Conway..... | Cedar..... | 6,104 | 1,831 |
| Aug. 4, 1896 | Gaffney & Long..... | Granite..... | 4,990 | 1,604 |
| Aug. 4, 1896 | R. F. Conway..... | Cedar..... | 2,825 | 669 |
| Oct. 2, 1896 | Chicago City Railway Co.... | "..... | 33,300 | 11,530 |
| Sept. 25, 1896 | Western P. & S. Co..... | Asphalt..... | 3,879 | 1,293 |
| July 8, 1896 | Henry Rath..... | Brick..... | 4,780 | 1,355 |
| July 31, 1896 | O. C. Simonds..... | Macadam..... | 5,306 | 1,194 |
| July 31, 1896 | O. C. Simonds..... | "..... | 4,067 | 1,274 |
| July 28, 1896 | J. V. McAdam..... | Brick..... | 3,812 | 900 |
| May 26, 1896 | O. Vider..... | Cedar..... | 6,832 | 2,050 |
| Nov. 30, 1896 | Brownell Imp. Co..... | Macadam..... | 4,200 | 1,260 |

SUMMARY.

| | | | | |
|--|---------|----|-------|--------|
| Total lineal feet cedar block pavement in alleys..... | 20,765 | or | 3.93 | miles. |
| Total lineal feet cedar block pavement in streets..... | 210,360 | " | 39.84 | " |
| Total lineal feet asphalt pavement in alleys..... | 130 | " | 0.02 | " |
| Total lineal feet asphalt pavement in streets..... | 89,700 | " | 16.99 | " |
| Total lineal feet granite pavement in alleys..... | 479 | " | 0.09 | " |
| Total lineal feet granite pavement in streets..... | 18,292 | " | 3.47 | " |
| Total lineal feet macadam pavement in streets..... | 71,827 | " | 13.60 | " |
| Total lineal feet brick pavement in alleys..... | 1,495 | " | 0.29 | " |
| Total lineal feet brick pavement in streets..... | 23,363 | " | 4.42 | " |
| Total lineal feet curb and fill in streets..... | 18,018 | " | 3.42 | " |

Total 454,429 or 86.07 miles.

SUMMARY OF STREETS IMPROVED DURING 1896.

| PAVEMENT. | NORTH DIVISION, Including Lake View and Rogers Park. | | | SOUTH DIVISION, Including Hyde Park and Lake. | | | WEST DIVISION, Including Jefferson and Cicero. | | | TOTALS. | | | | |
|-------------------------|--|-----------------|--------|---|-----------------|--------|--|-----------------|--------|------------------|-----------------|--------|-------------------|--------------------|
| | Square Yards. | Lineal Feet. | Miles. | Square Yards. | Lineal Feet. | Miles. | Square Yards. | Lineal Feet. | Miles. | Square Yards. | Lineal Feet. | Miles. | Alleys. Miles. | Streets. Miles. |
| | | | | | | | | | | | | | | |
| Cedar Blocks,..... | 146,590 | 40,489 | 7.67 | 205,334 | 58,307 | 11.04 | 456,589 | 132,339 | 25.06 | 808,513 | 231,125 | 43.77 | 3.93 | 39.84 |
| Asphalt | 20,230 | 5,130 | 0.97 | 84,798 | 24,090 | 4.56 | 200,910 | 60,610 | 11.48 | 305,938 | 89,830 | 17.01 | 0.02 | 16.99 |
| Granite | 14,603 | 3,736 | 0.71 | 40,379 | 9,867 | 1.87 | 20,819 | 5,168 | 0.98 | 75,801 | 18,771 | 3.56 | 0.09 | 3.47 |
| Macadam | 100,405 | 28,272 | 5.35 | 131,190 | 35,598 | 6.74 | 25,679 | 7,957 | 1.51 | 237,274 | 71,827 | 13.60 | ..... | 13.60 |
| Brick | 17,567 | 4,911 | 0.93 | 73,133 | 17,575 | 3.33 | 6,279 | 2,372 | 0.45 | 96,979 | 24,858 | 4.71 | 0.29 | 4.42 |
| Totals..... | 299,395 | 82,538 | 15.63 | 535,034 | 145,437 | 27.54 | 710,276 | 208,436 | 39.48 | 1,544,705 | 436,411 | 82.65 | 4.33 | 78.32 |
| Curbed and Filled | | 5,417 | 1.03 | ..... | 811 | 0.16 | ..... | 11,790 | 2.23 | ..... | 18,018 | 3.42 | ..... | 3.42 |
| Grand Totals, | 299,395 | 87,955 | 16.66 | 535,034 | 146,248 | 27.70 | 710,276 | 220,226 | 41.71 | 1,544,705 | 454,429 | 86.07 | 4.33 | 81.74 |

TABLE SHOWING PERCENTAGE OF EACH CLASS OF PAVEMENT.

| PAVEMENT. | 1896. | | 1895. | | 1894. | | 1893. | | 1892. | |
|-----------------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|--------|-----------|
| | Miles. | Per Cent. | Miles. | Per Cent. | Miles. | Per Cent. | Miles. | Per Cent. | Miles. | Per Cent. |
| Cedar Block... | 752.68 | 63.59 | 726.01 | 64.62 | 705.07 | 64.90 | 648.38 | 64.38 | 554.75 | 63.13 |
| Macadam | 344.31 | 29.09 | 332.14 | 29.56 | 324.69 | 29.89 | 310.81 | 30.86 | 282.74 | 32.19 |
| Medina Stone . | 2.43 | 0.21 | 2.49 | 0.22 | 2.58 | 0.24 | 2.58 | 0.26 | 2.58 | 0.29 |
| Granite Block . | 25.27 | 2.13 | 23.31 | 2.07 | 22.90 | 2.11 | 22.64 | 2.25 | 21.82 | 2.50 |
| Sheet Asphalt. | 45.94 | 3.88 | 30.75 | 2.74 | 24.99 | 2.29 | 16.65 | 1.65 | 12.32 | 1.40 |
| Block Asphalt . | 3.05 | 0.26 | 3.59 | 0.32 | 3.59 | 0.33 | 3.59 | 0.36 | 3.59 | 0.40 |
| Brick | 8.88 | 0.75 | 4.17 | 0.37 | 1.31 | 0.12 | 1.09 | 0.11 | 0.67 | 0.07 |
| "Foundation" | 1.08 | 0.09 | 1.08 | 0.10 | 1.08 | 0.10 | 1.08 | 0.11 | ..... | ..... |
| Burnt Clay ... | ..... | ..... | ..... | ..... | 0.23 | 0.02 | 0.23 | 0.02 | 0.23 | 0.02 |
| Totals .. | 1,183.64 | 100 | 1,123.54 | 100 | 1,086.44 | 100 | 1,007.95 | 100 | 878.70 | 100 |

DISTRIBUTION OF KIND OF PAVEMENT.

| DIVISION. | Cedar Block. | Macadam | Medina Stone. | Granite. | Sheet Asphalt. | Block Asphalt. | Brick. | Foundation. | Totals. |
|-------------|--------------|---------|---------------|----------|----------------|----------------|--------|-------------|----------|
| North | 162.24 | 63.01 | 0.49 | 0.81 | 4.88 | ..... | 1.57 | 1.08 | 234.08 |
| South | 207.83 | 259.70 | 1.55 | 20.26 | 10.42 | 3.05 | 5.25 | ..... | 508.06 |
| West | 332.61 | 21.60 | 0.39 | 4.20 | 30.64 | ..... | 2.06 | ..... | 441.50 |
| TOTALS..... | 752.68 | 344.31 | 2.43 | 25.27 | 45.94 | 3.05 | 8.88 | 1.08 | 1,183.64 |

RECAPITULATION OF STREETS AND ALLEYS BY TOWNSHIPS, SHOWING IMPROVED AND UNIMPROVED
STREETS AND ALLEYS AT THE CLOSE OF THE YEAR 1896.

| TOWNSHIP | Total Streets— Miles. | Total Alleys— Miles. | Cedar Block. | Macadam. | Medina Stone. | Granite. | Sheet Asphalt. | Block Asphalt. | Brick. | "Foundation." | Improved Streets and Alleys—Miles. | Unimproved Streets and Alleys—Miles. | Repaired in 1896 —Miles. | | |
|-------------------------|--------------------------|-------------------------|--------------|----------|---------------|----------|----------------|----------------|--------|---------------|--|--|-----------------------------|---------|--------|
| | | | | | | | | | | | | | Streets. | Alleys. | Total. |
| *Hyde Park | 749.78 | 357.45 | 28.39 | 179.61 | ..... | ..... | 5.67 | ..... | 3.38 | ..... | 217.05 | 890.18 | 0.94 | ..... | 0.94 |
| Jefferson | 319.83 | 121.53 | 39.18 | 1.29 | ..... | ..... | 0.77 | ..... | ..... | ..... | 41.24 | 400.12 | ..... | ..... | ..... |
| Lake | 390.31 | 258.99 | 59.37 | 70.96 | ..... | ..... | ..... | ..... | 0.54 | ..... | 130.87 | 518.43 | ..... | ..... | ..... |
| Lake View | 157.17 | 102.60 | 60.37 | 57.37 | ..... | ..... | ..... | ..... | 1.06 | ..... | 118.80 | 140.97 | 0.23 | ..... | 0.23 |
| North Town | 169.72 | 78.60 | 98.03 | 1.62 | 0.49 | 0.81 | 4.57 | ..... | 0.51 | ..... | 106.03 | 142.29 | 4.21 | ..... | 4.21 |
| Norwood Park | 26.50 | 10.43 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 36.93 | ..... | ..... | ..... |
| Rogers Pk. & West Ridge | 35.55 | 17.25 | 3.84 | 4.02 | ..... | ..... | 0.31 | ..... | ..... | 1.08 | 9.25 | 43.55 | ..... | ..... | ..... |
| South Town | 230.26 | 108.18 | 120.07 | 9.13 | 1.55 | 20.26 | 4.75 | 3.05 | 1.33 | ..... | 160.14 | 178.40 | 6.59 | 0.23 | 6.82 |
| West Town | 490.41 | 285.00 | 343.43 | 20.31 | 0.39 | 4.20 | 29.87 | ..... | 2.06 | ..... | 400.26 | 375.15 | 10.35 | ..... | 10.35 |
| Totals | 2,569.63 | 1,340.03 | 752.68 | 344.31 | 2.43 | 25.27 | 45.94 | 3.05 | 8.88 | 1.08 | †1,183.64 | 2,726.02 | 22.32 | 0.23 | 22.55 |

* Including Calumet, Washington Heights and Gano. † Of this total paved mileage 1,075.02 are Streets and 108.62 are Alleys.

The following table shows the amount of pavement laid in streets and alleys each year since the introduction of street paving in 1855 to the present year. From 1835 to 1844 the work on streets consisted of grading only. From 1844 to 1855 improvements were made by plank-ing, after which the more substantial forms of paving came into use :

| YEAR. | MILES. | YEAR. | MILES. | YEAR. | MILES. | | |
|-------------|--------|-------|--------|--------------|---------|----------|-------------------|
| | | | | | Alleys. | Streets. | Totals. |
| 1855 | 1.72 | 1868 | 5.46 | 1881 | 0.13 | 24.39 | 24.52 |
| 1856 | 0.26 | 1869 | 18.32 | 1882 | 0.58 | 24.37 | 24.95 |
| 1857 | 2.62 | 1870 | 19.96 | 1883 | 1.96 | 20.53 | 22.49 |
| 1858 | 7.20 | 1871 | 25.63 | 1884 | 1.60 | 32.92 | 34.52 |
| 1859 | 5.70 | 1872 | 1.82 | 1885 | 1.16 | 36.90 | 38.06 |
| 1860 | ..... | 1873 | 10.19 | 1886 | 1.51 | 42.15 | 43.66 |
| 1861 | 0.69 | 1874 | 9.07 | 1887 | 2.60 | 34.15 | 36.75 |
| 1862 | 2.57 | 1875 | 11.49 | 1888 | 2.19 | 52.14 | 54.33 |
| 1863 | 2.00 | 1876 | 10.50 | 1889 } | 3.78 | 103.90 | *146.54 107.68 |
| 1864 | 2.40 | 1877 | 12.29 | 1890 | 8.50 | 91.22 | 99.72 |
| 1865 | 2.03 | 1878 | 11.01 | 1891 | 12.86 | 104.73 | 117.59 |
| 1866 | 8.87 | 1879 | 6.83 | 1892 | 14.26 | 93.71 | 107.97 |
| 1867 | 11.37 | 1880 | 16.84 | 1893 } | 31.36 | 106.10 | *6.91 137.46 |
| | | | | 1894 | 16.94 | 75.01 | 91.95 |
| | | | | 1895 | 5.27 | 42.48 | 47.75 |
| | | | | 1896 | 4.33 | 78.32 | 82.65 |
| Totals..... | | | | | 109.03 | 1,003.02 | 1,432.34 |

* The mileage in heavy type opposite the years 1889 and 1893 gives the total amount of paved streets prior to those years in the annexed territories of Hyde Park, Lake and Lake View, and of Rogers Park and West Ridge, respectively.

Of this amount 248.70 miles have been repaved during the same period, which reduces the actual amount of paved streets and alleys within the corporate limits on December 31, 1896, to 1,183.64 miles (streets, 1,075.02; alleys, 108.62). To this may be added 1,494.61 miles of unimproved streets, and 1,231.41 miles of unimproved alleys; which makes a total of 3,909.66 miles of streets in Chicago at this date.

RECAPITULATION.

| STREETS. | Streets-Miles. | Alleys-Miles. | Total-Miles. |
|------------------|----------------|---------------|--------------|
| Improved | 1,075.02 | 108.62 | 1,183.64 |
| Unimproved | 1,494.61 | 1,231.41 | 2,726.02 |
| Total Miles..... | 2,569.63 | 1,340.03 | 3,909.66 |

REPAVING.

The amount of repaving done by the division foremen in repairing improved streets, the replacing of pavement where openings were made by Water, Sewer and Fire Departments, etc., and on account of street permits and general repairs, is shown in the following table :

| FOR WHAT PURPOSE. | NORTH DIV. | SOUTH DIV. | WEST DIV. | TOTAL. |
|--|-------------|-------------|-------------|-------------|
| | Square Yds. | Square Yds. | Square Yds. | Square Yds. |
| General Repairs..... | 38,630 | 46,573 | 71,095 | 156,298 |
| Water Department..... | 765 | 256 | 391 | 1,412 |
| Sewer Department..... | 13 | 536 | 162 | 711 |
| Fire Department..... | | 60 | | 60 |
| Street Permits..... | 4,849 | 13,689 | 6,824 | 25,362 |
| TOTALS..... | 44,257 | 61,114 | 78,472 | 183,843 |
| Amount of repaving done by contract- ors on street repairs for the City.... } | 11,478 | 37,739 | 87 | 49,304 |
| GRAND TOTAL..... | 55,735 | 98,853 | 78,559 | 233,147 |

(Of the 183,843 square yards of repaving, 85,742 square yards was with old material.)

Total number of square yards, 233,147.

The above does not include any repaving done by contractors for gas companies, Bureau of Light, etc.

LUMBER.

The following table shows in detail the amount of lumber used by the division foremen in the construction and repair of aprons, culverts, crossings, etc., and also for sidewalk intersections and general repairs:

| FOR WHAT USED. | NORTH DIVISION. | | SOUTH DIVISION. | | WEST DIVISION. | |
|---------------------------------|-----------------|-----------|-----------------|-----------|----------------|-----------|
| | No. | LUMBER. | No. | LUMBER. | No. | LUMBER. |
| | | Sq. Feet. | | Sq. Feet. | | Sq. Feet. |
| Aprons | 119 | 3,121 | 451 | 17,676 | 383 | 32,814 |
| Crossings | 237 | 9,958 | 1,245 | 166,781 | 1,005 | 124,092 |
| Culverts | 44 | 8,265 | 777 | 128,900 | 406 | 42,775 |
| Drains | 16 | 807 | 81 | 43,019 | 71 | 11,471 |
| Steps and Railings | 242 | 1,970 | 142 | 6,011 | 293 | 15,230 |
| Street repairs | | 28,626 | | 32,503 | | 50,763 |
| Sidewalk intersections | 473 | 27,241 | 455 | 34,137 | 927 | 101,518 |
| Sidewalk, general repairs | | 131,751 | | 684,028 | | 576,231 |
| Totals | | 211,739 | | 1,113,055 | | 954,894 |

RECAPITULATION.

North Division 211,739 feet of lumber.
 South Division 1,113,055 feet of lumber.
 West Division 954,894 feet of lumber.

Grand Total..... 2,279,688 feet of lumber

(In this amount is included 290,342 feet of old lumber.)

Total number of aprons built and repaired..... 953
 Total number of crossings built and repaired 2,487
 Total number of culverts built and repaired 1,227
 Total number of drain boxes built and repaired..... 168
 Total number of steps and railings built and repaired 677
 Total number of intersections built and repaired. 1,855

UNIMPROVED STREETS.

The money at the disposal of this Bureau for the purpose of grading, ditching, etc., has been judiciously expended in keeping unimproved streets in good passable condition, and keeping ditches flooded in localities where sewers have not yet been built.

The total length of streets graded and ditched by the division foremen amounts, in the aggregate, to nine hundred and three (903) miles, proportioned as follows :

| | Grading. | Ditching. |
|----------------------|------------|------------|
| North Division | 3 miles. | 8 miles. |
| South Division | 87 miles. | 164 miles. |
| West Division | 590 miles. | 51 miles. |
| Totals..... | 680 miles. | 223 miles. |

The division foremen cleaned macadam streets as follows :

| | |
|----------------------|------------|
| North Division | 68 miles. |
| South Division..... | 82 miles. |
| West Division..... | 3 miles. |
| Total | 153 miles. |

SIDEWALKS.

During the year 1896, 150.84 miles of plank sidewalk, 82.73 miles of concrete walk, and 3.03 miles of stone walk were constructed, making a total of 236.60 miles ; 1.65 miles of concrete walks were constructed by the various park boards, making a grand total for the year of 238.25 miles.

Two hundred and fifty-nine ordinances were passed for wood walks of which six were repealed, 125 for concrete walks of which thirteen were repealed, and fifteen for stone walks of which one was repealed, making a total of 399 ordinances passed for sidewalks, of which number 379 are now in force.

There were 289 estimates for plank walks and 139 estimates for concrete and stone walks prepared for the Honorable City Council during the year.

Seven thousand two hundred and sixteen (7,216) complaints of defective walks were registered, reported on by the inspectors and notice sent to the property owners to put same in proper condition. About ninety per cent. complied with said notice.

The following tables show in detail the amount of sidewalk constructed during the year, and the total mileage now under control of the City and various park boards:

NUMBER OF MILES OF WOOD, STONE AND CONCRETE SIDEWALKS
BUILT DURING 1896.

| DIVISION. | Wood, Miles. | Stone, Miles. | Concrete, Miles. | Total Miles. | Sidewalks Repaired. | Total Miles. |
|--------------|-----------------|------------------|---------------------|-----------------|------------------------|-----------------|
| North | 28.02 | 0.58 | 27.75 | 56.35 | 0.18 | 56.53 |
| South | 68.9 | 0.65 | 28.72 | 98.27 | 1.07 | 99.34 |
| West | 53.92 | 1.8 | 26.26 | 81.98 | 1.83 | 83.81 |
| Totals | 150.84 | 3.03 | 82.73 | 236.60 | 3.08 | 239.68 |

TOTAL NUMBER OF MILES OF SIDEWALK UNDER THE CONTROL
OF THE CITY AND THE SOUTH, WEST AND LINCOLN PARK
COMMISSIONERS AT THE CLOSE OF THE YEAR.

| UNDER CONTROL OF | MATERIAL. | | | TOTAL MILES. |
|----------------------------------|-----------------|------------------|---------------------|-----------------|
| | Wood, Miles. | Stone, Miles. | Concrete, Miles. | |
| City | 3,900.14 | 233.53 | 609.73 | 4,743.40 |
| South Park Commissioners | | 20.00 | 30.74 | 50.74 |
| West Park Commissioners | | 11.05 | 51.04 | 62.09 |
| Lincoln Park Commissioners | | 2.17 | 4.70 | 6.87 |
| Totals | 3,900.14 | 266.75 | 698.21 | 4,865.10 |

At the suggestion of this Bureau, the City Council extended the districts in which the construction of wooden sidewalks is prohibited in the different divisions of the City, as follows:

NORTH DIVISION.

Commencing at the river and running east on the north line of Lake street to the east line of Fifth avenue; thence north along the east line of Fifth avenue and Wells street to Wisconsin street; thence west on the south line of Wisconsin street to east line of Halsted street; thence north of the east line of Halsted street to the south line of Fullerton avenue; thence west on the south line of Fullerton avenue to the east line of Racine avenue; thence north of the east line of Racine avenue to the east line of Clark street; thence north on the east line of Clark street to the city limits.

SOUTH DIVISION.

Commencing at the eastern terminus of Fifty-fifth street and running west on the south side of said Fifty-fifth street to State street; thence north on the west line of State street to Van Buren street; thence west on the south line of Van Buren street to the river.

WEST DIVISION.

Commencing at the west line of the Chicago river and extending along the south line of Van Buren street to the west line of Western avenue; thence north of the west line of Western avenue to the north line of Lake street, thence east on north line of Lake street to west line of Ashland avenue, thence north on said west line of Ashland avenue to the south line of Chicago avenue, thence west on the south line of Chicago avenue to the east line of Western avenue, thence north on the east line of Western avenue to the south line of Division street, thence west on the south line of Division street to the west line of California avenue, thence north on the west line of California avenue to the north line of North avenue, thence east on the north line of North avenue, to the northeast line of Milwaukee avenue, thence southeast on the northeast line of Milwaukee avenue to the north line of Lake street, thence east on the north line of Lake street to the river.

Taking into consideration the improved appearance of the streets where stone or concrete walks have been substituted for wooden ones, the saving in cost of repair to the property owner and the City, and the removal of the cause of accidents through defective walks, fully justified this change.

PERMITS FOR OPENING STREETS.

Two thousand and fifty-four (2,054) permits were issued to sundry persons to open improved streets. A cash deposit covering cost of replacing pavement, etc., to its original condition was made on each permit issued.

Three thousand one hundred and forty-five (3,145) openings were made on improved streets by gas companies and sundry other corporations, under general and special deposits, the work of replacing the pavements being done by contractors, subject to inspection and acceptance of the Department, the cost of such inspection being borne by the respective corporations.

Five thousand six hundred (5,600) permits were issued to sundry persons to open unimproved streets. The City incurring no expense on account of these openings, no deposit was required. These permits, however, are issued to licensed plumbers, contractors, etc., only upon filing a bond to protect the City against damages resulting from accidents through such openings.

Total number of openings, ten thousand seven hundred and ninety-nine (10,799).

The following statement shows in detail the amount of deposits, cost of repairs, amount rebated, etc.:

OPENING STREETS.

| | |
|--|-------------|
| Amount of deposits made | \$41,169 65 |
| Amount retained for cost of repaving..... | 10,555 46 |
| Amount rebated to depositors..... | 24,611 06 |
| Amount retained on unsettled permits | 6,003 13 |
| Average amount of each deposit | 20 04 |
| Average amount retained for costs..... | 5 14 |

CORPORATION PERMITS.

| | |
|---|-------------|
| Amount of deposits made | \$76,688 02 |
| Amount of repaving charges..... | 37,487 06 |
| Amount rebated to depositors..... | 23,375 85 |
| Amount retained on unsettled permits | 15,825 11 |
| Amount paid by corporations for inspection..... | 36,010 66 |

PERMITS FOR USE OF STREETS.

Seven hundred and forty-five (745) permits were issued to sundry parties to occupy streets for the purpose of depositing material thereon during the construction of buildings. A uniform deposit is made in each instance, and a bond filed by the party securing permit to protect the City against possible damage suits in case of accident, due to the negligence of owner or contractor, during life of permits.

The following statement shows in detail the amount of deposits, cost of repairs, amount rebated, etc.:

| | |
|---|-------------|
| Amount of cash deposits made..... | \$27,923 00 |
| Amount retained for use of streets..... | 4,113 00 |
| Amount rebated to depositors..... | 17,477 00 |
| Amount retained on unsettled permits..... | 6,333 00 |
| Average amount of cash deposits..... | 37 48 |
| Average amount retained for use of streets..... | 5 52 |

HOUSE-MOVING.

Eight hundred and fifty-five (855) permits to move buildings were granted, of which seven hundred and three (703) were for frame buildings, one hundred and fifty-one (151) brick, and one (1) iron, the total frontage aggregating seventeen thousand eight hundred and sixty-eight (17,868) lineal feet.

Of this number one hundred and ninety-one (191) were in the North Division, two hundred and eighty (280) in the South Division, and three hundred and eighty-four (384) in the West Division. Four hundred and seven (407) were one story, four hundred and eleven (411) were two stories, and thirty-seven (37) were three stories high.

Total cash receipts, one thousand six hundred and ninety dollars (\$1,690.00).

The total receipts from permits issued during the year are inadequate to pay the salaries of the permit clerk and inspector, and there is, therefore, no surplus to repair the streets damaged. The necessity for a more equitable adjustment of charges for permits is apparent.

Under City ordinances at present the fees are limited to one dollar (\$1.00) for moving a building to another part of the same lot upon which the building stands ; and a charge of (\$5.00) for moving a building from one lot to another, where street is used.

Inasmuch as the amount of damage to streets over which buildings are moved depends wholly upon the weight of the building, and the amount of pavement disturbed by the driving of stakes and other methods necessarily employed by the house-mover in the prosecution of his work, the fees should be graded proportionate to the injury done.

HOUSE MOVING.

| MONTHS, 1886. | Permits Issued. | MATERIAL. | | | STORIES HIGH. | | | | DIVISION. | | | FRONTAGE. | FEES. | | Cash Receipts. |
|----------------|-----------------|-----------|--------|-------|---------------|------|--------|-------|-----------|--------|-------|-----------|--------|------|----------------|
| | | Frame. | Brick. | Iron. | One. | Two. | Three. | Four. | North. | South. | West. | | \$1.00 | 5.00 | |
| January..... | 69 | 56 | 13 | ..... | 29 | 35 | 5 | .... | 24 | 18 | 27 | 1,397 | 39 | 30 | \$ 189 00 |
| February..... | 72 | 56 | 16 | ..... | 30 | 38 | 4 | .... | 19 | 22 | 31 | 1,453 | 52 | 20 | 152 00 |
| March..... | 103 | 77 | 26 | ..... | 45 | 54 | 4 | .... | 34 | 24 | 45 | 2,114 | 80 | 23 | 195 00 |
| April..... | 163 | 142 | 21 | ..... | 72 | 86 | 5 | .... | 39 | 55 | 69 | 3,270 | 132 | 31 | 287 00 |
| May..... | 105 | 86 | 19 | ..... | 51 | 47 | 7 | .... | 14 | 42 | 29 | 2,131 | 84 | 21 | 189 00 |
| June..... | 62 | 52 | 10 | ..... | 32 | 28 | 2 | .... | 12 | 22 | 28 | 1,302 | 46 | 16 | 126 00 |
| July..... | 75 | 56 | 19 | ..... | 38 | 30 | 7 | .... | 13 | 23 | 39 | 1,656 | 47 | 28 | 187 00 |
| August..... | 50 | 44 | 6 | ..... | 25 | 25 | .... | .... | 14 | 15 | 21 | 1,035 | 38 | 12 | 98 00 |
| September..... | 49 | 37 | 12 | ..... | 30 | 18 | 1 | .... | 7 | 14 | 28 | 1,105 | 38 | 10 | 88 00 |
| October..... | 50 | 45 | 5 | ..... | 24 | 26 | .... | .... | 9 | 18 | 23 | 1,235 | 43 | 7 | 78 00 |
| November..... | 24 | 21 | 3 | ..... | 12 | 11 | 1 | .... | 3 | 11 | 10 | 487 | 21 | 3 | 36 00 |
| December..... | 33 | 28 | 4 | 1 | 19 | 13 | 1 | .... | 3 | 16 | 14 | 671 | 25 | 8 | 65 00 |
| TOTALS..... | 855 | 703 | 151 | 1 | 407 | 411 | 37 | .... | 191 | 280 | 384 | 17,868 | 645 | 209 | \$1,690 00 |

STREET LAMPS.

The large amount of work done by the City Lamp Department during the year 1896 surpasses that of any previous year in the history of Chicago. This was accomplished by strict economy and the application of systematic business methods.

During the year 1896 there were erected ten thousand four hundred and fifty-two (10,452) new and repaired gas and gasoline lamps, of which five thousand nine hundred and seventy-one (5,971) were City gas pattern, four thousand and fifty-six (4,056) Boulevard gas pattern, and the balance, four hundred and twenty-five (425) gasoline, which, together with the number of lamps previously erected, gives a grand total of fifty-four thousand two hundred and three (54,203) in the City. Six thousand and fifty-two gas lamps having been temporarily discontinued, leaves the total number of lamps in actual service December 31, 1896, 48,151.

The above grand total, including lights of all descriptions, is made up as follows:

| | |
|---|--------|
| Gas lamps—People's Gas Light & Coke Co..... | 17,875 |
| Chicago Gas Light & Coke Co..... | 6,966 |
| Suburban Gas Co..... | 4,261 |
| Hyde Park Gas Co..... | 3,578 |
| Lake Gas Co. | 2,902 |
| Calumet Gas Co..... | 546 |
| Total gas lamps | 36,128 |
| Gasoline | 10,258 |
| Electric, City plants..... | 1,243 |
| Electric by contract..... | 522 |
| Total number in actual service | 48,151 |

In addition to the above, this Department takes care of six thousand and fifty-two (6,052) services and posts at present discontinued on account of insufficient appropriation. The above number of services is distributed amongst the different gas companies.

GAS LAMPS ERECTED.

| | |
|--|--------|
| New gas lamps placed on posts for Special Assessment Department during the year 1896, and for which credit will be made to the Street Lamp Fund— | |
| City pattern lamp..... | 1,210 |
| Boulevard pattern lamp..... | 292 |
| Boulevard erected by order of Common Council in front of public buildings and churches | 83 |
| New and repaired City pattern gas lamps, placed on posts, to replace worn out ones | 4,761 |
| Boulevard, repaired and placed on posts | 3,681 |
| Gasoline lamps for repairs..... | 425 |
| Total | 10,452 |

STREET SIGNS.

The total number of street signs made and placed in position, thirteen thousand two hundred and four (13,204) of various kinds, as follows :

| | |
|--|--------|
| Blue glass signs, City pattern lamps..... | 11,370 |
| Electric glass signs, 4x18..... | 50 |
| Miner glass signs, 3½x11¾..... | 893 |
| Tin signs for wagons, Street Department..... | 300 |
| Wood signs for different City parks and streets..... | 68 |
| Sign frames..... | 523 |
| <hr/> | |
| Total number of signs..... | 13,204 |

LAMP POSTS ERECTED.

| | |
|--|-------|
| Posts erected, moved and placed to grade and proper location, and leaks repaired. | 681 |
| Posts straightened and fastened..... | 2,190 |
| <hr/> | |
| Total..... | 2,871 |

This Department has also taken care of and kept in repair and good condition 44,200 lamp services.

The above work has for years past been done by the different gas companies, and the result of this Department taking charge and doing the necessary repairs, is a saving of some thousands of dollars to the City.

The following is a statement which shows in detail the amount received and cost of work done, and total expenditure for the year, including the amount paid the different gas companies, pay roll, supplies, etc.

RECEIPTS.

| | |
|---|--------------|
| Appropriation | \$ 40,000 00 |
| Received from Special Assessment Department for work done | \$ 11,041 00 |
| Collected from permits..... | 218 50 |
| Bills collected from various parties on account of damage done to lamps and posts by accident | 924 55 |
| Collected from sale of broken posts..... | 37 25 |
| <hr/> | |
| | 12,221 30 |
| <hr/> | |
| Total receipts | \$52,221 30 |

I would further state that this Bureau has done \$1,100.00 worth of work for different City Departments for which returns have not yet been made.

EXPENDITURES.

| | |
|----------------|--------------|
| Pay roll | \$ 30,640 60 |
| Supplies | 10,061 90 |

GAS COMPANIES.

| | |
|-----------------------------------|-------------|
| People's Gas Light & Coke Co..... | \$ 5,983 71 |
| Chicago Gas Light & Coke Co | 2,750 16 |
| Lake Gas Co..... | 311 80 |
| Hyde Park Gas Co..... | 212 19 |
| Suburban Gas Co..... | 736 18 |
| | <hr/> |
| | 9,994 04 |

Grand total cost of material, labor of all kinds, used in the manufacture and repair of street lamps, posts, services, street signs, and other repair work incidental to gas or gasoline operations

\$ 50,696 54

Leaving a credit to this Department of.....

\$ 1,524 76

RAILROAD GATES AND FENCES.

The amount of work done up to date by the various railroad companies in compliance with the Council order of March 26, 1890, for the erection of gates, fences and lights for the greater safety of the public, is shown in the following table:

| NAME. | Fences Constructed—Miles. | | | | | Total Miles. | Gates in Operation | Kind of Lights in Use. |
|--|---------------------------|--------|---------|--------|--------|--------------|--------------------|------------------------|
| | Wall. | Board. | Picket. | Metal. | Wire. | | | |
| Chicago & North-Western | .46 | 6.79 | 10.17 | 2.55 | 38.59 | 58.56 | 116 | Gas. |
| Illinois Central..... | 11.34 | .20 | .15 | .20 | 22.00 | 33.89 | 32 | Electric. |
| Chicago, Rock Island & Pacific..... | 1.70 | .11 | 4.59 | .... | 4.78 | 11.18 | 29 | Electric. |
| Chicago, Milwaukee & St. Paul..... | ..... | ..... | ..... | ..... | 13.69 | 13.69 | 63 | Gas. |
| Chicago & Northern Pacific ..... | ..... | .34 | ..... | 2.75 | 6.50 | 9.59 | 29 | Oil. |
| Pennsylvania Railroad Co..... | ..... | 1.60 | 8.58 | .... | .46 | 10.64 | 48 | Electric. |
| Lake Shore & Michigan Southern..... | 2.35 | 8.64 | ..... | ..... | 2.40 | 13.39 | 25 | Electric. |
| Chicago, Burlington & Quincy ..... | ..... | 5.05 | ..... | ..... | 4.74 | 9.79 | 34 | Gas and oil. |
| New York, Chicago & St. Louis..... | ..... | ..... | 4.18 | ... | 6.77 | 10.95 | ... | Oil. |
| Baltimore & Ohio..... | ..... | .60 | ..... | ..... | 5.91 | 6.51 | 7 | Electric. |
| Pittsburg, Cincinnati & St. Louis..... | .31 | .16 | 3.01 | .63 | 12.42 | 16.53 | 104 | Oil and electric. |
| Atchison, Topeka & Santa Fe..... | ..... | .49 | ..... | ..... | 5.78 | 6.27 | 23 | Oil. |
| Chicago & Grand Trunk..... | ..... | ..... | ..... | ..... | 3.60 | 3.60 | 7 | Oil. |
| Chicago & Western Indiana..... | ..... | ..... | 1.36 | ... | 33.31 | 34.67 | 48 | Electric. |
| Wabash ..... | ..... | ..... | ..... | ..... | 7.50 | 7.50 | ... | ..... |
| Chicago & Alton..... | .11 | ... | .03 | ... | 3.48 | 3.67 | 54 | Oil and gas. |
| Union Stock Yards & Transit Co..... | ..... | ..... | ..... | ..... | ..... | ..... | 15 | Electric. |
| Totals | 16.27 | 23.98 | 32.12 | 6.13 | 171.93 | 250.43 | 634 | |

STREET RAILWAYS.

Street railway extensions were made by the different companies as follows :

CALUMET ELECTRIC STREET RAILWAY COMPANY.

| STREET | FROM | TO | Lineal feet | POWER |
|-----------------------|---------------------|---------------------|-------------|-------------|
| Avenue L..... | Ninety-eighth..... | 108th..... | 6,500 | Electric. |
| Avenue N..... | Ninety-fifth..... | Ninety-eighth..... | 2,000 | " |
| Bond avenue..... | Cheltenham place.. | Eighty-third..... | 3,300 | " |
| Cheltenham place.... | Lake avenue..... | Bond avenue..... | 500 | " |
| Eighty-third..... | Bond avenue..... | I. C. R. R..... | 900 | " |
| Ninety-first..... | Mackinaw avenue.. | Erie avenue..... | 1,600 | " |
| Ninety-eighth..... | Avenue N..... | Avenue L..... | 700 | " |
| 108th..... | Avenue L..... | State line..... | 4,000 | " |
| Railroad avenue..... | Seventy-third..... | Seventy-eighth.... | 4,000 | " |
| Seventy-eighth..... | Railroad avenue.... | Lake avenue..... | 1,500 | " |
| Seventy-third..... | Stony Island ave.. | Railroad avenue.... | 6,000 | " |
| Sixty-sixth..... | South Park avenue. | St. Lawrence ave.. | 1,300 | " |
| St. Lawrence avenue.. | Sixty-sixth..... | Seventy-fifth..... | 6,000 | " |
| South Park avenue.... | Sixty-third..... | Sixty-seventh..... | 2,600 | " |
| Total..... | | | 40,900 | 7.75 miles. |

CHICAGO CITY RAILWAY COMPANY.

| STREET | FROM | TO | Lineal feet | POWER |
|--------------------|--------------------|--------------------|-------------|-----------|
| Archer avenue..... | Thirty-eighth..... | Kedzie avenue.... | 11,880 | Electric. |
| Centre avenue..... | Sixty-third..... | Forty-seventh..... | 21,120 | " |
| Fifty-ninth..... | State..... | Leavitt..... | 29,040 | " |
| Forty-seventh..... | Western avenue.. | Kedzie avenue.... | 10,560 | " |
| Halsted..... | Sixty-ninth..... | Seventy-ninth.... | 13,200 | " |
| Kedzie avenue..... | Thirty-eighth..... | Sixty-third..... | 33,000 | " |
| Sixty-ninth..... | Leavitt..... | Western avenue.... | 8,620 | " |
| Total..... | | | 121,420 | 23 miles. |

CHICAGO ELECTRIC TRANSIT COMPANY.

| STREET | FROM | TO | Lineal feet | POWER |
|-------------------------|--------------------|--------------------|-------------|------------|
| California avenue..... | Belmont avenue.... | Roscoe boulevard.. | 1,329 | Electric. |
| Irving Park boulevard.. | Evanston avenue.. | Milwaukee avenue.. | 26,133 | " |
| Total..... | | | 27,462 | 5.2 miles. |

CHICAGO GENERAL RAILWAY COMPANY.

| STREET | FROM | TO | Lineal feet | POWER |
|----------------------|--------------------|--------------------|----------------|-------------|
| Lawndale avenue..... | Twenty-eighth | Thirty-fifth | 4,200 | Electric. |
| Twenty-second | Lawndale avenue.. | Ogden avenue | 4,200 | " |
| Twenty-fifth | Homan avenue.... | Kedzie avenue | 1,350 | " |
| Total | | | 6,950 | 1.31 miles. |

ENGLEWOOD & CHICAGO ELECTRIC RAILWAY COMPANY.

| STREET | FROM | TO | Lineal feet | POWER |
|-------------------------|---------------------|---------------------|----------------|-------------|
| Eighty-first | Vincennes road ... | Halsted | 2,380 | Electric. |
| Halsted | Eighty-first | Summit avenue ... | 2,420 | " |
| Seventy-first | South Chicago ave. | State | 2,580 | " |
| Seventy-ninth | State | Vincennes road ... | 2,640 | " |
| Sixty-seventh | Vernon avenue | Vincennes avenue . | 320 | " |
| South Chicago avenue .. | Vincennes avenue . | Seventy-first | 2,740 | " |
| State | Seventy-first | Seventy-ninth | 5,280 | " |
| Summit avenue | Halsted | Vincennes road ... | 1,040 | " |
| Vernon avenue | Sixty-third | Sixty-seventh | 2,640 | " |
| Vincennes avenue | Sixty-seventh | South Chicago ave. | 660 | " |
| Vincennes road | Seventy-ninth | Eighty-first | 1,350 | " |
| Vincennes road | Summit avenue ... | 107th | 13,990 | " |
| Total | | | 40,740 | 7.71 miles. |

OGDEN STREET RAILWAY COMPANY.

| STREET | FROM | TO | Lineal feet | POWER |
|-----------------------|---------------|-------------------|----------------|-------------|
| Fortieth avenue | Madison | Twelfth | 5,510 | Electric. |
| Fortieth avenue | Twelfth | Ogden avenue | 5,390 | " |
| Total | | | 10,900 | 2.06 miles. |

METROPOLITAN WEST SIDE ELEVATED RAILROAD COMPANY.

| STREET | FROM | TO | Lineal feet | POWER |
|--------------------|---------------|--------------------|----------------|------------|
| Branch ..... | ..... | ..... | ..... | ..... |
| Douglas Park | Paulina | Western avenue ... | 12,670 | Electric. |
| Total | | | 12,670 | 2.4 miles. |

SOUTH CHICAGO CITY RAILWAY COMPANY.

| STREET | FROM | TO | Lineal feet | POWER |
|---------------------|---------------------|-------------------|----------------|-----------|
| Sixty-fourth..... | Stony Island ave .. | Madison avenue... | 1,320 | Electric. |
| Madison avenue..... | Sixty-fourth | Sixty-third | 660 | " |
| Total..... | | | 1,980 | .37 mile. |

UNION LOOP COMPANY.

| STREET | FROM | TO | Lineal feet | POWER |
|--------------------|-------------------|-------------------|----------------|------------|
| Fifth avenue | Lake | Van Buren | 3,400 | Electric. |
| Van Buren..... | Fifth avenue..... | Wabash avenue ... | 2,100 | " |
| Wabash avenue..... | Van Buren.... | Lake..... | 3,400 | " |
| Total..... | | | 8,900 | 1.7 miles. |

NUMBER OF MILES OF STREETS OCCUPIED BY HORSE, CABLE,
ELECTRIC AND ELEVATED RAILWAYS IN SERVICE
DECEMBER 31, 1896.

| CORPORATIONS. | Cable. | Horse. | Electric. | Elevated. | | Total. |
|--|--------|--------|-----------|-----------|----------|--------|
| | | | | Steam. | Electric | |
| Calumet Electric Street Railway Co... | | | 35.45 | | | 35.45 |
| Chicago City Railway Co... | 17.72 | 4.70 | 77.75 | | | 100.17 |
| Chicago Electric Transit Co..... | | | 14.33 | | | 14.33 |
| Chicago General Railway Co..... | | | 9.92 | | | 9.92 |
| Chicago & Jefferson Urban Transit Co..... | | | 2.85 | | | 2.85 |
| Chicago North Shore Street Railway Co..... | | | 8.00 | | | 8.00 |
| Cicero & Proviso Street Railway Co..... | | | | 8.21 | | 8.21 |
| Chicago & S. S. Rapid Transit Co..... | | | 3.5 | | | 3.5 |
| Englewood & Chicago Elec. St. Ry. Co..... | | | 7.71 | | | 7.71 |
| †General Electric Railway Co..... | | | | | | |
| Lake Street Elevated Railroad Co..... | | | | 6.75 | | 6.75 |
| Metropolitan West Side Elevated R. R..... | | | | | 13.6 | 13.6 |
| North Chicago Electric Railway Co..... | | | 6.75 | | | 6.75 |
| North Chicago Street Railroad Co..... | 9.25 | 3.00 | 36.11 | | | 48.36 |
| North Side Electric Street Railway Co..... | | | 2.84 | | | 2.84 |
| *Northwestern Elevated Railroad Co..... | | | | | | |
| Ogden Street Railway Co..... | | | 8.06 | | | 8.06 |
| South Chicago City Railway Co..... | | | 17.32 | | | 17.32 |
| Union Elevated Railroad Co..... | | | | | 1.7 | 1.7 |
| West Chicago Street Railroad Co..... | 14.98 | 1.50 | 79.69 | | | 96.17 |
| Totals..... | 41.95 | 9.20 | 310.28 | 14.96 | 15.3 | 391.69 |

* In course of construction. † Incorporated.

For the uniform courtesy extended to me by your Department and other City officials with whom my duties brought me in contact, I feel profoundly grateful.

The loyal support of my assistants, and the cheerful obedience of the subordinates in the several departments of this Bureau, made it possible for me to carry out your instructions and thereby render acceptable service to the public.

Respectfully submitted,

R. J. MACDONALD,

Superintendent of Streets.

REPORT OF THE
BUREAU OF
Street and Alley Cleaning
CITY OF CHICAGO

BUREAU OF

STREET AND ALLEY CLEANING

HON. JOSEPH DOWNEY,

Commissioner of Public Works :

DEAR SIR: In presenting the annual report of this Bureau for the year 1896, I respectfully refer you to the following statement of receipts and expenditures, which indicates a judicious and economical distribution of the funds appropriated, and with an efficient and energetic corps of assistants I have been able to accomplish the best possible results in all branches of the public service coming under the jurisdiction of this Bureau.

FINANCIAL.

| | |
|--|---------------|
| Appropriation | \$ 651,000 00 |
| Sundries, receipts from dump, etc..... | 21,420 05 |
| | <hr/> |
| Total amount to defray expenses | \$ 672,420 05 |

EXPENDITURES.

| | |
|--|---------------|
| Garbage account..... | \$ 312,573 08 |
| Street cleaning account..... | 268,636 74 |
| Ward foremen account..... | 33,972 57 |
| Office salaries account | 9,499 14 |
| Removal of dead animals..... | 37,500 00 |
| Balance turned over to general fund..... | 10,238 52 |
| | <hr/> |
| | \$ 672,420 05 |

During the year 2,448.58 lineal miles of streets were cleaned at an expense of \$8.40 per mile—10,837.23 lineal miles of streets were cleaned at \$12.50 per mile—2,360.83 lineal miles of streets were cleaned at \$2.50 (work done in day time in the First district); 209.35 lineal miles of alleys at \$6.80 per mile (First district), 312.73 lineal miles of bridges, viaducts and approaches at \$8.40 per lineal mile, making a total of \$165,976.03.

Since November 12, 1896, 1,107 lineal miles of streets were cleaned under this Bureau by the City by hand, cost of which amounted to \$12,047.25, or an average of \$10.88 per mile.

The unimproved alleys were cleaned during the year at a cost of \$10,051.89.

During the year 16,769 dead animals were removed from the City; of this number 5,753 were horses, 284 cows, 10,002 dogs and 730 cats.

To remove the garbage and ashes from thirty-four wards it took 83,806 teams, making 197,127 loads, amounting to 10,020,934 yards.

My experience in the management of the Street Cleaning Bureau has led me to investigate the merits of the various systems under which such work is performed, and I have reached the conclusion that the City is laboring under disadvantages and sustaining annually great financial loss in consequence of the law prohibiting the letting of City contracts for a term not exceeding one year. The work of sweeping and cleaning the streets and alleys of the City necessitates the expenditure of a large sum of money for the necessary machinery and outfit, and persons competing for such work must not only be in possession of sufficient resources to procure such plant, but must make their bid sufficiently high to cover a probable loss from the purchase of an outfit for doing such work which they may not be permitted to continue beyond one season; thus the same conditions prevail from year to year, the City losing annually.

To provide against such loss and [place the City in a position to sweep and clean the streets and alleys in a satisfactory manner, at a minimum cost, I would suggest (the propriety of) the City owning the machinery and necessary apparatus required in the performance of such work.] Such ownership would be valuable in preventing a possible combination to maintain excessive prices, and the City under an emergency would be in position to do the whole work with day labor, or if to be done under contract, the small amount of capital required under such conditions would admit of greater competition in securing such contract, and would further secure to the City a greatly improved service, with clean streets at a reduced cost.

Respectfully,

J. C. W. RHODE,

Superintendent.

REPORT OF THE

Bureau of Special Assessments

CITY OF CHICAGO

BUREAU OF SPECIAL ASSESSMENTS.

HON. JOSEPH DOWNEY,

Commissioner of Public Works.

DEAR SIR:—I submit herewith, in tabular form, a statement of special assessments made in this Department during the year 1896, with a summary of the estimated cost of the same ; also the amount of special assessments made each year during the past thirty-six years.

In submitting this report, I beg to hope that the new bill in regard to special assessments prepared by the Law Department, under the direction of the Mayor and City Council, may become a law, as it does away with the objectionable features of the present law.

Very truly yours,

H. J. JONES,

Sup't of Special Assessments.

WOODEN BLOCK PAVEMENT.

| No. of Ward | IMPROVEMENT | NAME OF STREET | FROM | TO | AMOUNT |
|----------------|--------------|-------------------------|-------------------|-----------------------------------|--------------|
| 21396 | G. and P. | Elston avenue | North avenue | Armitage avenue | \$ 13,000 00 |
| 21427 | C. F. and P. | Francisco | Van Buren | Harrison | 4,662 84 |
| 21428 | C. G. and P. | Indiana avenue | Fifty-first | Fifty-fifth | 27,724 15 |
| 21429 | C. G. and P. | Fifty-sixth | State | South Park avenue | 18,463 38 |
| 21430 | C. G. and P. | Sixty-ninth | Halsted | Ashland avenue | 39,819 57 |
| 21437 | C. G. and P. | Blue Island avenue | Halsted | West Fifteenth place | 35,698 94 |
| 21445 | C. F. and P. | Cross | Lyman | Thirty-first | 1,674 22 |
| 21472 | C. F. and P. | Keeney avenue | North avenue | Humboldt avenue | 28,392 70 |
| 21496 | C. G. and P. | Elston avenue | Division | North avenue | 16,392 43 |
| 21499 | C. G. and P. | Elizabeth | West Lake | 170 ft. north of Carroll avenue | 6,999 07 |
| 21501 | C. G. and P. | Clara place | System | North branch of Chicago river | 38,245 04 |
| 21507 | C. G. and P. | West Division | Milwaukee avenue | Ashland avenue | 16,524 46 |
| 21521 | C. F. and P. | Sixty-third | Centre avenue | Wabash Railroad | 20,067 17 |
| 21522 | C. G. and P. | Forty-sixth | Halsted | West Nineteenth | 15,671 73 |
| 21523 | C. G. and P. | Avers avenue | West Nineteenth | Ogden avenue | 6,500 00 |
| 21524 | C. F. and P. | West Twenty-third place | California avenue | Douglas Park boulevard | 7,000 00 |
| 21526 | C. G. and P. | Superior | North Clark | North State | 4,313 28 |
| 21532 | C. F. and P. | Lincoln | Asylum place | Webster avenue | 8,752 55 |
| 21537 | C. F. and P. | Spaulding avenue | Ogden avenue | Douglas boulevard | 14,708 25 |
| 21540 | C. G. and P. | Birch | Robey | Kendall | 3,890 31 |
| 21545 | C. G. and P. | Eugenie | North Clark | Sedgwick | 9,519 40 |
| 21548 | G. and P. | Erie | Wells | North branch of Chicago river | 12,388 91 |
| 21569 | C. G. and P. | Halsted | Archer avenue | 155 ft. south of Twenty-fifth pl. | 1,989 50 |
| 21594 | C. F. and P. | Congress Park | Van Buren | Harrison | 5,627 77 |
| 21595 | C. F. and P. | West Forty-second | Lake | Twelfth | 59,081 77 |
| 21661 | C. G. and P. | Erie | Wells | State | 9,516 22 |
| 21664 | C. G. and P. | Le Moine | Leavitt | California avenue | 20,000 00 |
| 21665 | C. G. and P. | Washtenaw avenue | Jackson boulevard | Washington boulevard | 11,122 50 |
| 21669 | C. G. and P. | Clinton | Milwaukee avenue | 331 feet north | 2,584 55 |
| 21715 | C. G. and P. | Thomas | Leavitt | Wood | 14,500 00 |
| 21744 | C. G. and P. | La Salle | Thirty-ninth | 338 feet south | 2,203 20 |
| 21754 | C. F. and P. | West Twenty-third place | Hoeyne avenue | Oakley avenue | 8,600 00 |
| 21773 | C. F. and P. | North Fortieth avenue | Armitage avenue | North avenue | 19,227 38 |
| 21776 | C. G. and P. | Cornell | Ashland avenue | Milwaukee avenue | 17,113 45 |
| 21777 | C. G. and P. | Fifty-eighth | Wentworth avenue | Stewart avenue | 7,916 65 |
| 21778 | C. G. and P. | Morgan street system | Sixty-fifth | Sixty-ninth | 66,461 34 |

| | | | | | | |
|-------|--------------|-----------------------|-------------------------------|-------------------------------|-----------------------|---------------|
| 21779 | C. G. and P. | Robey | Forty-seventh. | Forty-seventh. | Fifty-second | 27,000 00 |
| 21780 | C. G. and P. | Forty-seventh. | Paulina | Forty-seventh. | Western avenue. | 26,000 00 |
| 21781 | C. G. and P. | Lincoln | Forty-seventh. | Forty-seventh. | Fifty-first. | 21,064 22 |
| 21783 | C. G. and P. | North avenue | North branch of Chicago river | North branch of Chicago river | Ashland avenue. | 10,000 00 |
| 21784 | C. G. and P. | West Polk. | Ogden avenue | Ogden avenue | Western avenue. | 11,699 50 |
| 21786 | C. G. and P. | Sheldon. | Madison | Madison | Washington boulevard. | 2,890 31 |
| 21802 | G. and P. | State | Thirty-ninth | Thirty-ninth | Fortieth | 2,156 85 |
| 21803 | C. G. and P. | Hermitage avenue. | Addison. | Addison. | Lincoln avenue | 8,464 11 |
| 21825 | C. F. and P. | Frankisco. | Twelfth | Twelfth | Lexington | 12,301 04 |
| 21866 | C. F. and P. | Berlin. | System. | System. | | 40,000 00 |
| 21867 | C. F. and P. | Curtis. | Fulton | Fulton | Carroll avenue | 1,686 70 |
| 21878 | C. G. and P. | Cornelia. | Ashland avenue | Ashland avenue | Milwaukee avenue | 12,000 00 |
| 21908 | C. F. and P. | Thirty-seventh place. | Halsted | Halsted | Morgan | 9,706 10 |
| 21918 | C. F. and P. | Thirty-fifth court | Halsted | Halsted | Morgan | 9,320 70 |
| 21973 | C. F. and P. | Leavitt. | West Chicago avenue. | West Chicago avenue. | Division | 20,160 86 |
| 22014 | C. G. and P. | Iowa. | Hoyne avenue | Hoyne avenue | Leavitt. | 5,189 12 |
| 22130 | C. F. and P. | Hamburg | Western avenue | Western avenue | Robey | 17,841 00 |
| 22136 | C. G. and P. | Cottage Grove avenue | South Chicago avenue | South Chicago avenue | Seventy-fifth | 14,640 46 |
| 22137 | C. G. and P. | Thirty-third | Halsted | Halsted | Morgan | 4,999 00 |
| 22138 | C. G. and P. | Phillips | Sangamon. | Sangamon. | Green. | 1,804 50 |
| 22181 | Repaving. | Canal | Adams. | Adams. | Van Buren | 7,285 71 |
| 22182 | C. F. and P. | Oak | Larrabee | Larrabee | Hawthorne avenue. | 4,067 24 |
| 22191 | C. G. and P. | Green. | Carroll avenue | Carroll avenue | Lake | 4,351 55 |
| 22205 | C. and P. | Cornelia. | Robey | Robey | Leavitt. | 9,809 08 |
| 22218 | C. G. and P. | Twenty-fourth | State | State | Wabash avenue. | 2,450 00 |
| 22223 | C. F. and P. | Sawyer avenue. | Twenty-second | Twenty-second | Twenty-sixth | 17,000 00 |
| 22228 | C. F. and P. | Spaulding avenue | Van Buren | Van Buren | Congress | 1,370 35 |
| 22293 | C. F. and P. | Twelfth | Forty-fourth avenue | Forty-fourth avenue | Forty-sixth avenue. | 9,000 00 |
| 22294 | C. G. and P. | Marshfield avenue. | Sixty-third | Sixty-third | Sixty-fifth | 9,500 00 |
| 22296 | C. F. and P. | Cortez | Robey | Robey | Leavitt. | 10,000 00 |
| Total | | | | | | \$ 920,111 13 |

MACADAMIZED PAVEMENT.

| No. of Warr't | IMPROVEMENT | NAME OF STREET | FROM | TO | AMOUNT |
|------------------|--------------------------|-----------------|---------------|---------------|-------------|
| 21363 | C. F. and M. | Atlantic | Thirty-ninth | Root. | \$ 8,867 93 |
| 21364 | C. G. and M. (N.S. & S.) | 120th | Clinton | Halsted | 2,021 83 |
| 21399 | C. G. and M. | Madison avenue. | Sixty-seventh | Seventy-fifth | 37,230 19 |

MACADAMIZED PAVEMENT—CONTINUED.

| No. of War't | IMPROVEMENT | NAME OF STREET | FROM | TO | AMOUNT |
|--------------|--------------|---------------------------|---------------------------------|----------------------------|---------------|
| 21405 | C. G. and M. | Sixtieth | State | South Park avenue | \$ 14,886 84 |
| 21432 | C. G. and M. | Fifty-eighth | Cottage Grove avenue | Ellis avenue | 6,171 01 |
| 21433 | C. G. and M. | Sheridan road | North Fifty-ninth | Bryn Mawr avenue | 13,463 76 |
| 21561 | C. G. and M. | North Forty-second avenue | Berteau avenue | Grace | 12,256 58 |
| 21570 | C. G. and M. | Catalpa place | Humboldt boulevard | Edgewood avenue | 10,500 00 |
| 21698 | C. G. and M. | Sixtieth place | Halsted | Union avenue, etc. | 12,500 00 |
| 21734 | C. G. and M. | Elm | State | Lake Shore drive | 7,091 73 |
| 21768 | C. G. and M. | Pine | Chicago avenue | Indiana | 10,525 12 |
| 21774 | C. G. and M. | Seventieth | Stony Island avenue | Cregier avenue | 3,567 48 |
| 21787 | C. G. and M. | Champlain avenue | Sixty-third | Sixty-seventh | 16,399 82 |
| 21804 | C. F. and M. | Rice | Washienaw avenue | Rockwell | 4,500 00 |
| 21828 | C. F. and M. | Irving Park boulevard | North Forty-eighth avenue | Robey | 121,277 82 |
| 21836 | C. G. and M. | South Normal Park way | Wright | C., R. I. & P. Ry. | 5,841 09 |
| 21846 | C. F. and M. | Cornelia | Washienaw avenue | Rockwell | 4,500 00 |
| 21877 | G. and M. | Vernon avenue | Thirty-first | Thirty-third | 4,813 92 |
| 21880 | C. G. and M. | Fiftieth | Grand boulevard | Cottage Grove avenue | 10,186 36 |
| 21883 | C. F. and M. | Hamlin avenue | Chicago avenue | North avenue | 34,954 12 |
| 21905 | C. F. and M. | Avers avenue | Grand avenue | West North avenue | 12,270 04 |
| 21974 | C. G. and M. | Superior | Rush | 450 feet east of St. Clair | 7,180 00 |
| 21991 | C. F. and M. | Argyle | Clark | Evanston avenue | 9,350 00 |
| 22148 | C. G. and M. | Pine | Indiana | Illinois | 2,108 00 |
| 22149 | C. F. and M. | South Hamilton avenue | Archer avenue | Thirty-seventh | 5,003 31 |
| 22189 | C. G. and M. | Craft | Aldine avenue | Belmont avenue | 1,586 38 |
| 22190 | C. G. and M. | Sherwin avenue | C., E. & L. S. R. | 1,300 feet east | 6,400 00 |
| 22295 | C. G. and M. | Kimball avenue | Diversey | Wrightwood avenue | 4,264 00 |
| 22344 | C. G. and M. | System of streets | St. Lawrence avenue, etc., etc. | | 148,000 00 |
| Total | | | | | \$ 557,717 28 |

VITRIFIED BRICK PAVEMENT.

| No. of Warr't | IMPROVEMENT | NAME OF STREET | FROM | TO | AMOUNT |
|------------------|--------------|-----------------------|-------------------|--------------------------------|---------------|
| 21352 | C. G. and P. | Groveland avenue. | Twenty-ninth. | Thirty-third | \$ 28,430 45 |
| 21414 | C. G. and P. | Vernon avenue. | System. | Seventy-fifth. | 42,000 00 |
| 21503 | C. F. and P. | South Chicago avenue. | South Park avenue | Seventy-fifth. | 92,005 09 |
| 21583 | C. G. and P. | Carpenter | Honore | Chicago avenue. | 7,433 06 |
| 21544 | C. G. and P. | Wisconsin | North Clark | Sedgwick | 4,814 03 |
| 21634 | C. G. and P. | Franklin | Van Buren | Charles place | 5,425 50 |
| 21769 | C. G. and P. | Paulina | Lincoln avenue | Cornelia | 5,442 07 |
| 22132 | C. G. and P. | Ogden avenue | Warren avenue. | West Twelfth. | 74,500 00 |
| 22184 | C. G. and P. | Wentworth avenue | Fifty-fifth | Sixty-third | 55,330 92 |
| 22206 | G and P | Bissell | Garfield avenue | First alley S. of Webster ave. | 3,718 45 |
| | Total | | | | \$ 319,099 57 |

SHEET ASPHALT PAVEMENT.

| No. of Warr't | IMPROVEMENT | NAME OF STREET | FROM | TO | AMOUNT |
|------------------|--------------|--------------------|-------------------|-------------------------|--------------|
| 21422 | G. G. and P. | South Park avenue. | Twenty-fourth. | Thirty-fifth | \$ 82,912 10 |
| 21431 | P | Prairie avenue | Twenty-second | Twenty-fifth | 21,054 82 |
| 21439 | C. G. and P. | Elizabeth | West Randolph | West Lake | 3,816 10 |
| 21494 | C. G. and P. | West Madison | Centre avenue | Paulina | 37,212 61 |
| 21498 | C. F. and P. | St. Louis avenue. | Madison | Colorado avenue | 17,932 00 |
| 21525 | C. G. and P. | Ellis avenue | Forty-first | Forty-third | 11,000 00 |
| 21597 | C. F. and P. | Turner avenue | West Twelfth. | Douglas Park boulevard. | 12,820 60 |
| 21600 | C. F. and P. | Evans avenue. | Sixty-third | Sixty-seventh | 26,919 10 |
| 21611 | C. F. and P. | Humboldt | Cornelia | Division | 16,500 00 |
| 21656 | G. and P. | Dearborn avenue. | Chicago avenue | Burton place. | 10,613 90 |
| 21729 | C. F. and P. | Addison avenue. | System. | Forty-sixth avenue. | 36,327 30 |
| 21735 | C. F. and P. | Park avenue. | Fortieth avenue. | West Van Buren | 54,500 00 |
| 21764 | C. G. and P. | Stanley terrace | Jackson boulevard | Ogden avenue | 4,053 60 |
| 21822 | G. and P. | Warren avenue. | Leavitt | 98 foot east of Fall | 15,702 00 |
| 21871 | C. G. and P. | Warren avenue | Homan avenue. | Lake Shore drive. | 50,000 00 |
| 21873 | C. G. and P. | Division. | North Clark | | 16,000 00 |

SHEET ASPHALT PAVEMENT—CONTINUED.

| No. of War'nt | IMPROVEMENT | NAME OF STREET | FROM | TO | AMOUNT |
|---------------|-------------------|--|---------------------------------|----------------------|---------------|
| 21876 | C. G. and P. | West Madison | Canal | Jefferson | \$ 8,900 62 |
| 21885 | C. F. and P. | South Park avenue | Sixty-seventh | Seventy-first | 23,639 64 |
| 21933 | F. and P. | Milwaukee avenue | Ashland avenue | North avenue | 33,943 70 |
| 22127 | C. G. and P. | West Madison | Paulina | Western avenue | 47,736 54 |
| 22343 | C. G. and P. | System of streets, Cottage Grove | avenue, Thirty-ninth, etc ..... | ..... | 46,861 45 |
| | Total ..... | ..... | ..... | ..... | \$ 577,246 08 |

GRANITE BLOCK PAVEMENT.

| No. of War'nt | IMPROVEMENT | NAME OF STREET | FROM | TO | AMOUNT |
|---------------|-------------------|-----------------------|-----------------------|----------------------------------|--------------|
| 21394 | C. G. and P. | Rush | Ohio | Chicago river | \$ 16,893 15 |
| 21409 | G. and P. | Jefferson | Van Buren | Harrison | 11,682 41 |
| 21436 | C. G. and P. | River | Michigan avenue | 250 feet east | 3,273 11 |
| 21555 | C. G. and P. | West Madison | Canal | South branch Chicago river | 3,953 03 |
| 21632 | G. and P. | Washington | Canal | West Water | 2,617 35 |
| 21663 | C. G. and P. | Fulton | Desplaines | Canal | 13,404 12 |
| 21785 | C. G. and P. | West Washington | Desplaines | Canal | 13,458 48 |
| 21837 | C. G. and P. | Michigan | Clark | Wells | 12,502 57 |
| 21895 | G. and P. | Pacific avenue | Harrison | Polk | 12,744 70 |
| | Total ..... | ..... | ..... | ..... | \$ 90,528 92 |

ALLEYS—WOODEN BLOCK PAVEMENT.

| No. of War'nt | IMPROVEMENT | FROM | BETWEEN | AMOUNT |
|---------------|-------------------|-------------------------------------|---|-------------|
| 21401 | C. G. and P. | Flournoy to Lexington | Springfield avenue and Douglas Park boulevard | \$ 1,792 65 |
| 21596 | C. F. and P. | Kedzie avenue to Homan avenue | Congress and Harrison | 2,961 87 |
| 21601 | C. F. and P. | Desplaines to Jefferson | Adams and Jackson | 1,536 33 |
| 21633 | C. G. and P. | Forty-second to Forty-third | Wabash and Michigan avenues | 1,534 90 |

| | | | | |
|-------|-------------------|---|---|--------------|
| 21668 | C. G. and P. | Central Park avenue to St. Louis avenue. | Adams and Jackson boulevard. | 1,593 13 |
| 21674 | C. F. and P. | Albany avenue to Troy. | Colorado avenue and Jackson boulevard. | 1,681 00 |
| 21686 | C. G. and P. | Wells to Franklin. | Ohio and Indiana. | 1,140 15 |
| 21741 | C. F. and P. | Forty-fifth to Forty-fifth place. | Halsted and Emerald avenue. | 803 25 |
| 21755 | C. G. and P. | Vernon to Rhodes avenues. | First south of Thirty-fifth. | 500 00 |
| 21775 | C. G. and P. | Forty-second place to Forty-third. | Vincennes avenue and Grand boulevard. | 2,261 22 |
| 21800 | C. F. and P. | Congress to Harrison. | First west of Sacramento avenue. | 864 40 |
| 21851 | G and P. | Aldine square south to E. & W. alley. | Vincennes and Stanton avenues. | 300 00 |
| 21852 | C. G. and P. | Forty-fourth to Forty-fifth. | Lowe avenue and Wallace. | 1,326 46 |
| 21856 | C. G. and P. | Ashland avenue to Lafin. | Edgemont avenue and Twelfth. | 1,788 80 |
| 21860 | C. F. and P. | Union to Wallace. | Forty-third and Forty-fourth. | 948 18 |
| 21864 | C. G. and P. | Washtenaw avenue to California avenue. | Adams and Jackson boulevard. | 1,465 03 |
| 21872 | G. and P. | Fortieth to Forty-first. | Vincennes and Langley avenues. | 3,713 19 |
| 22078 | C. G. and P. | Thirty-ninth to Fortieth. | Dearborn and State. | 1,629 76 |
| 22129 | C. G. and P. | Green to Randolph. | Halsted and Washington. | 1,938 41 |
| 22204 | C. and P. | Liberty to Jefferson. | Fourteenth and Union. | 1,233 67 |
| 22207 | C. G. and P. | Forty-fifth to Forty-fifth place. | Vincennes avenue and Grand boulevard. | 1,928 61 |
| 22208 | C. G. and P. | Twenty-ninth to Thirtieth. | Canal and Butler. | 1,252 95 |
| | Total. .... | ..... | ..... | \$ 34,193 86 |

ALLEYS—VITRIFIED BRICK PAVEMENT.

| No. of War't | IMPROVEMENT | FROM | BETWEEN | AMOUNT |
|--------------|-------------------|-----------------------------------|--|-------------|
| 21517 | C. G. and P. | Clark to Dearborn. | Monroe and Adams. | \$ 1,406 16 |
| 21820 | C. F. and P. | Kedzie avenue to alley west. | Warren avenue and Washington boulevard. | 4,772 68 |
| | Total. .... | ..... | ..... | \$ 6,178 84 |

ALLEYS—ASPHALT PAVEMENT.

| No. of War't | IMPROVEMENT | FROM | BETWEEN | AMOUNT |
|--------------|-------------------|------------------------------|--------------------------------|-------------|
| 21909 | C. G. and P. | Polk to 400 feet south. | Clark and Pacific avenue. | \$ 1,408 75 |
| | Total. .... | ..... | ..... | \$ 1,408 75 |

ALLEYS—GRANITE BLOCK PAVEMENT.

| No. of War'nt | IMPROVEMENT | FROM | BETWEEN | AMOUNT |
|---------------|-------------------|--|-----------------------------|-----------|
| 21403 | C. G. and P. | Michigan avenue to 125 feet east | South Water and River. | \$ 961 90 |
| | Total | | | \$ 961 90 |

OPENING AND WIDENING STREETS AND ALLEYS.

| No. of War'nt | IMPROVEMENT | NAME OF STREET | FROM | TO | AMOUNT |
|---------------|----------------------------|------------------------------------|-------------------------------------|--------------------------|---------------|
| 21413 | Opening | Polk | Central Park avenue | Garfield boulevard | \$ 8,403 50 |
| 21421 | Widening | South Park avenue | Sixtieth | Sixty-first | 2,113 00 |
| 21434 | Opening | Forquer | Central Park avenue | Garfield boulevard | 8,579 50 |
| 21435 | Opening | Lexington avenue | Central Park avenue | Garfield boulevard | 7,829 00 |
| 21506 | Opening | A | Lake | Park avenue | 4,441 70 |
| 21770 | Opening | Sixtieth | State | Wentworth avenue | 52,758 83 |
| 21788 | Opening | Alley between Archer avenue, | Lyman, Elias ct. and Bonfield | Auburn | 3,353 00 |
| 21886 | Opening | Thirty first place | Laurel | Auburn | 3,594 30 |
| 22113 | Opening | Flournoy | Central Park avenue | Garfield boulevard | 8,579 50 |
| 22345 | Opening and Widening | State | Ninety-fifth | 111th | 31,167 27 |
| | Total | | | | \$ 132,819 60 |

WATER SUPPLY PIPES.

| No. of War'nt | NAME OF STREET | FROM | TO | AMOUNT |
|---------------|---------------------------------|-----------------------------|---------------------------------|-------------|
| 21351 | Forty-seventh | Kedzie avenue | Hamlin avenue | \$ 6,085 46 |
| 21395 | North Forty-second avenue | West Chicago avenue | Augusta | 2,263 10 |
| 21402 | Crystal | North Fortieth avenue | North Forty second avenue | 1,716 14 |
| 21407 | North Forty-second court | West Chicago avenue | Iowa | 903 44 |
| 21410 | North Forty-fourth court | Courtland avenue | Armitage avenue | 737 18 |
| 21411 | Fifty-ninth | Cottage Grove avenue | I. C. R. R | 5,244 88 |

| | | | | |
|-------|---------------------------|-----------------------------------|-------------------------------|-----------|
| 21412 | North Forty-fifth avenue | Armitage avenue | Courtland avenue | 808 56 |
| 21415 | North Forty-fourth avenue | West Chicago avenue | Augusta | 2,279 00 |
| 21416 | West Chicago avenue | North Fortieth avenue | North Forty-fourth avenue | 5,354 06 |
| 21417 | Iowa | North Forty-second avenue | North Forty-fourth avenue | 1,652 54 |
| 21418 | North Forty-third avenue | West Chicago avenue | Augusta | 1,949 34 |
| 21419 | North Forty-third court | West Chicago avenue | Iowa | 983 78 |
| 21420 | Cornelia | North Forty-second avenue | North Forty-fourth avenue | 1,719 32 |
| 21425 | South Forty-first avenue | Harvard | Lexington | 918 89 |
| 21446 | West Van Buren | 200 feet east of West Forty-third | West Forty-sixth place | 2,820 66 |
| 21504 | Lexington | Kedzie avenue | Central Park avenue | 3,577 50 |
| 21508 | Haddon avenue | Forty-second avenue | Forty-sixth avenue | 3,738 62 |
| 21509 | Augusta | North Forty-second | North Forty-sixth | 4,110 68 |
| 21510 | West Division | Fortieth avenue | Forty-sixth avenue | 8,973 96 |
| 21511 | Thomas | North Forty-second avenue | North Forty-sixth avenue | 3,738 62 |
| 21512 | Cortez | North Forty-second avenue | North Forty-sixth avenue | 3,738 62 |
| 21513 | North Forty-third avenue | West Division | Augusta | 1,665 26 |
| 21514 | Sheffield avenue | Bryn Mawr avenue | Foster avenue | 3,535 10 |
| 21516 | Elston avenue | Montrose boulevard | Forest Glen avenue | 14,601 18 |
| 21520 | North Forty-first avenue | Armitage avenue | Bloomington road | 1,808 36 |
| 21527 | Butler | 118th | 119th | 738 64 |
| 21528 | Fullerton avenue | North Fifty-sixth avenue | North Sixtieth avenue | 3,816 00 |
| 21641 | Montrose avenue | Western avenue | North branch of Chicago river | 2,053 34 |
| 21644 | Sixty-ninth | South Park avenue | Calumet avenue | 562 51 |
| 21645 | Phillips | Green | Halsted | 210 25 |
| 21672 | Butler | 100th | 100th place | 419 34 |
| 21673 | North Fortieth court | Armitage avenue | Wabansia avenue | 2,656 36 |
| 21677 | North Fortieth court | Wabansia avenue | North avenue | 752 03 |
| 21678 | North Forty sixth court | Fullerton avenue | North avenue | 1,927 44 |
| 21679 | Lydia | Halsted | Humboldt avenue | 603 71 |
| 21680 | Dix | Front | Union | 738 64 |
| 21681 | North Forty-first court | Hirsch | Lessing | 1,684 99 |
| 21682 | Catalpa court | Humboldt boulevard | North avenue | 1,045 50 |
| 21683 | Carpenter | West Forty-eighth | Fullerton avenue | 1,759 98 |
| 21684 | May | West Forty-eighth | West Fiftieth | 1,786 76 |
| 21685 | Aberdeen | West Forty-eighth | West Fiftieth | 1,821 00 |
| 21742 | Elizabeth avenue | Ninety-second | Ninety-third | 854 82 |
| 21743 | Central avenue | Ninety-second | Ninety-third | 854 82 |
| 21746 | Harvard | South Fortieth avenue | Ninety-third | 897 66 |
| 21747 | South Fortieth court | West Sixteenth | South Forty-first | 519 25 |
| 21765 | Seventy-fourth | Lexington avenue | 300 feet south | 449 20 |
| 21807 | Chicago avenue | Forty-eighth avenue | Woodlawn avenue | 1,447 20 |
| 21808 | Crescent place | Halsted | Forty-ninth avenue | 969 43 |
| | | | Evanston avenue | |

WATER SUPPLY PIPES—CONTINUED.

| No. of Warr't | NAME OF STREET | FROM | TO | AMOUNT |
|------------------|----------------------------|------------------------------------|-------------------------------------|-------------|
| 21809 | Magnolia avenue | Devon avenue | Granville avenue | \$ 1,324 00 |
| 21811 | Seventy-third | Woodlawn avenue | I. C. R. R. | 390 50 |
| 21812 | Seventy-third | South Chicago avenue | Greenwood avenue | 796 32 |
| 21813 | Twelfth | Forty-third court | Forty-fourth avenue | 754 09 |
| 21814 | Fillmore | Forty-fourth avenue | Forty-fifth court | 1,603 00 |
| 21815 | Greshaw | Forty-fourth avenue | Forty-fifth court | 1,603 00 |
| 21818 | Winchester avenue | Eighty-seventh | Eighty-eighth | 854 82 |
| 21823 | Homan avenue | Central Park boulevard | Chicago avenue | 3,004 56 |
| 21824 | Avenue L | 106th | 110th | 3,810 70 |
| 21833 | Rockwell | West Twelfth | 720 feet south | 859 70 |
| 21834 | Fifty-seventh | Indiana avenue | South Park avenue | 1,664 20 |
| 21879 | Throop | Garfield boulevard | Fifty-ninth | 2,705 12 |
| 21882 | North Forty-first court | Humboldt avenue | Dickens avenue | 929 19 |
| 21898 | North Forty-first avenue | Bloomingtondale road | North avenue | 1,875 14 |
| 21900 | North Sawyer avenue | Fullerton avenue | Mentmore avenue | 947 50 |
| 21921 | Evanston avenue | Hood | Granville avenue | 503 80 |
| 21922 | Hood avenue | Southport avenue | Evanston avenue | 1,987 20 |
| 21923 | Colorado avenue | Forty-third avenue | 110 ft. S. W. of Forty sixth avenue | 3,784 01 |
| 21924 | North Forty-fifth court | West Berceau avenue | Irving Park avenue | 1,812 69 |
| 21927 | Sixty-ninth | Cottage Grove avenue | South Chicago avenue | 1,097 80 |
| 21928 | North Fifty-fourth avenue | Fullerton avenue | Wrightwood avenue | 2,179 20 |
| 21929 | 100th place | 125 feet east of State | Michigan avenue | 1,042 49 |
| 21931 | North Whipple | West George | Avondale avenue | 1,672 68 |
| 21932 | Eighty-seventh | Winchester avenue | Throop | 4,861 07 |
| 21979 | Ashtland avenue | Sixty-fifth | Sixty-seventh | 2,102 70 |
| 21980 | North Forty-fourth avenue | Cortland avenue | 61 ft. south of Bloomingdale road | 1,345 43 |
| 21981 | Sacramento avenue | Humboldt boulevard | 200 feet south | 429 64 |
| 21982 | West Division | North Homan avenue | Christiana avenue | 655 21 |
| 21983 | Wrightwood avenue | Logan square | Hamlin avenue | 6,065 17 |
| 21984 | Dickens avenue | North Hamlin avenue | Lawndale avenue | 1,497 54 |
| 21985 | Sunnyside avenue | Claremont avenue | Western avenue | 449 21 |
| 21986 | North Forty-seventh avenue | North avenue | 130 feet north of Wabansia avenue | 978 00 |
| 21987 | Edgewater avenue | Southport avenue | Clark | 1,589 22 |
| 21988 | Bishop | West Sixty-sixth | West Sixty-seventh | 960 87 |
| 21989 | Justine | 375 feet south of West Sixty-sixth | West Sixty-seventh | 395 65 |
| 21990 | Loomis | Sixty-fifth | Sixty-seventh | 1,666 67 |

| | | | | |
|-------|--|---------------------------------|---|--------------|
| 22026 | North Spaulding avenue..... | Kinzie..... | Central Park boulevard..... | 609 80 |
| 22052 | Bernard avenue..... | Elston avenue..... | Irving Park avenue..... | 2,215 16 |
| 22075 | South Forty-fourth court..... | West Fourteenth..... | West Fifteenth..... | 786 26 |
| 22076 | West Sixteenth..... | South Fortieth court..... | South Forty-second avenue..... | 1,139 40 |
| 22077 | South Forty-third avenue..... | West Fifteenth..... | West Sixteenth..... | 753 06 |
| 22079 | West Fullerton avenue..... | Monticello avenue..... | 100 feet east of North Fortieth avenue..... | 5,155 96 |
| 22080 | Seventy-second place..... | Woodlawn avenue..... | I. C. R. R..... | 416 25 |
| 22081 | South Forty-second court..... | West Fifteenth..... | West Sixteenth..... | 753 06 |
| 22103 | North Fifty-third avenue..... | Fullerton avenue..... | Grand avenue..... | 3,402 30 |
| 22104 | North Forty-third court..... | Fullerton avenue..... | Grand avenue..... | 3,255 90 |
| 22105 | Harvard..... | South Forty-second avenue..... | 250 feet west of S. Forty-second court..... | 881 60 |
| 22106 | Seventy-first..... | State..... | Perry avenue..... | 1,234 02 |
| 22107 | Crystal..... | North Forty-second avenue..... | North Forty-third avenue..... | 929 80 |
| 22109 | Ninety-first..... | Escanaba avenue..... | South Chicago avenue..... | 572 81 |
| 22110 | West Harrison..... | Forty-first avenue..... | Forty-second avenue..... | 978 00 |
| 22122 | North Lawndale avenue..... | West Bloomingdale road..... | West Cortland..... | 886 95 |
| 22125 | North Central Park avenue..... | West Belmont avenue..... | West Noble avenue..... | 913 73 |
| 22133 | Forty-fourth avenue..... | Twelfth..... | Fillmore..... | 942 65 |
| 22346 | System of streets, Tracy avenue and..... | court (Washington heights)..... | ..... | 26,000 00 |
| | Total..... | ..... | ..... | \$225,969 42 |

WATER SERVICE PIPES.

| No. of War't | NAME OF STREET | FROM | TO | AMOUNT |
|-----------------|-------------------------|---------------------|-----------------------------|-------------|
| 21424 | Madison avenue..... | Sixty-seventh..... | Seventy-fifth..... | \$ 2,128 00 |
| 21451 | Grace..... | Ashland avenue..... | Southport avenue..... | 360 00 |
| 21452 | Oiga..... | Grace..... | Waveland avenue..... | 577 50 |
| 21453 | West Fortieth..... | North avenue..... | Armitage avenue..... | 2,533 00 |
| 21500 | Justine..... | Fifty-fifth..... | Sixty-third..... | 4,911 75 |
| 21549 | Fifty-fourth place..... | Union avenue..... | Wallace..... | 558 00 |
| 21554 | Elizabeth avenue..... | Kedzie avenue..... | Homan avenue..... | 1,003 00 |
| 21564 | Humboldt avenue..... | Cornelia..... | Division..... | 682 50 |
| 21565 | Turner avenue..... | Twelfth..... | Douglas Park boulevard..... | 700 00 |
| 21568 | May..... | Sixty-third..... | Sixty-seventh..... | 1,326 00 |
| 21571 | Avers avenue..... | North avenue..... | Grand avenue..... | 1,886 00 |
| 21575 | Seventy-second..... | Schell avenue..... | I. C. R. R..... | 486 00 |
| 21576 | Woodlawn avenue..... | Seventy-first..... | Seventy-fifth..... | 918 00 |

WATER SERVICE PIPES—CONTINUED.

| No. of Warrant | NAME OF STREET | FROM | TO | AMOUNT |
|-------------------|-----------------------------|---------------------------|---------------------------|-----------|
| 21577 | Schell avenue..... | Seventy-first..... | South Chicago avenue..... | \$ 712 50 |
| 21578 | Carpenter..... | Sixty-third..... | Sixty-seventh..... | 1,122 00 |
| 21579 | Aberdeen..... | Sixty-third..... | Sixty-ninth..... | 1,530 00 |
| 21580 | Drexel avenue..... | Seventy-first..... | South Chicago avenue..... | 277 50 |
| 21581 | Cornelia..... | Washtenaw avenue..... | Rockwell..... | 805 00 |
| 21599 | Seminary avenue..... | Eddy avenue..... | Newport avenue..... | 270 00 |
| 21609 | Huron..... | Western avenue..... | Washtenaw avenue..... | 918 00 |
| 21610 | Fletcher avenue..... | Perry..... | Racine avenue..... | 490 00 |
| 21625 | Wellington avenue..... | Lincoln..... | Perry..... | 1,904 00 |
| 21626 | Ninety-third..... | St. Lawrence avenue..... | Cottage Grove avenue..... | 697 00 |
| 21627 | Champlain avenue..... | Sixty-third..... | Sixty-seventh..... | 1,411 00 |
| 21628 | Fifty-sixth place..... | Stewart avenue..... | Wallace..... | 185 00 |
| 21629 | Ridge avenue..... | Grand avenue..... | Devon avenue..... | 252 00 |
| 21630 | West Twentieth place..... | Peoria..... | Sangamon..... | 111 00 |
| 21631 | Paulina..... | Graceland avenue..... | Berteaue avenue..... | 448 50 |
| 21658 | Sheridan road..... | Bryn Mawr avenue..... | North Fifty-ninth..... | 1,824 00 |
| 21660 | Cornelia avenue..... | Willow avenue..... | Halsted..... | 765 00 |
| 21756 | Hermitage avenue..... | Forty-fifth..... | Forty-seventh..... | 1,275 00 |
| 21757 | Oakley avenue..... | Hamburg..... | Ems..... | 455 00 |
| 21758 | Lawdale avenue..... | Colorado avenue..... | Harrison..... | 332 50 |
| 21759 | West Eighteenth..... | Western avenue..... | California avenue..... | 1,258 00 |
| 21760 | Dobson avenue..... | Seventy-first..... | Seventy-third..... | 697 00 |
| 21761 | McLean avenue..... | Kimball avenue..... | Hamlin avenue..... | 1,326 00 |
| 21762 | Stanley terrace..... | Jackson boulevard..... | West Van Buren..... | 190 00 |
| 21789 | Brooks avenue..... | Seventy-third..... | Seventy-fifth..... | 1,295 00 |
| 21829 | Seventy-second..... | St. Lawrence avenue..... | Cottage Grove avenue..... | 111 00 |
| 21830 | Langley avenue..... | Seventy-first..... | Seventy-fifth..... | 1,870 00 |
| 21831 | Evans avenue..... | Seventy-first..... | Seventy-fifth..... | 1,751 00 |
| 21832 | Champlain avenue..... | Seventy-first..... | Seventy-fifth..... | 2,499 00 |
| 21881 | Thirty-third..... | Halsted..... | Laurel..... | 385 00 |
| 21913 | Oakley avenue..... | Thirty-first..... | Thirty-fifth..... | 1,275 00 |
| 21914 | Pierce avenue..... | North Kedzie avenue..... | North Homan avenue..... | 986 00 |
| 21919 | Farragut avenue..... | East Ravenswood Park..... | Ashland avenue..... | 1,172 50 |
| 21930 | Thirty-fifth place..... | Halsted..... | Laurel..... | 306 00 |
| 21950 | West Forty-ninth place..... | Morgan..... | Halsted..... | 1,007 00 |
| 21951 | Oakley avenue..... | Ems..... | Fullerton avenue..... | 646 00 |

| | | | | |
|-------------|--|----------------------------|--------------------------|--------------|
| 21952 | Phillips | Halsted | Sangamon | 350 00 |
| 21953 | Fiftieth place | Morgan | Halsted | 646 00 |
| 21954 | Stone avenue (Forty-seventh place) | Morgan | Centre avenue | 627 00 |
| 21955 | Seventy-first place | Woodlawn avenue | I. C. R. R. | 551 00 |
| 21956 | South Sawyer avenue | West Twenty-fourth | West Twenty-sixth | 1,368 00 |
| 21957 | Greenwood avenue | Seventy-first | Seventy-fifth | 1,026 00 |
| 21958 | Goodspeed | Forty-third | Forty-seventh | 1,197 00 |
| 21959 | Lexington | Seventy-first | Seventy-fourth | 969 00 |
| 21960 | Paulina | Forty-fifth | Forty-seventh | 836 00 |
| 21961 | Seventy-third | South Chicago avenue | I. C. R. R. | 817 00 |
| 21962 | Paulina | Forty-seventh | Fifty-first | 760 00 |
| 21963 | Leavitt | Chicago avenue | Division | 2,603 00 |
| 21964 | Cook | Forty-seventh | Forty-ninth | 235 50 |
| 21965 | Sixty-ninth | Calumet avenue | South Park avenue | 280 00 |
| 21966 | LeMoine | Kedzie avenue | Homan avenue | 912 00 |
| 21967 | Whipple | Elston avenue | Belmont avenue | 817 00 |
| 21968 | Burnett | Robey | Leavitt | 817 00 |
| 21969 | Cornelia | Robey | Leavitt | 1,007 00 |
| 21970 | Iowa | Hoyle avenue | Leavitt | 570 00 |
| 22013 | Weage avenue | North Kedzie avenue | North Homan avenue | 1,235 00 |
| 22037 | Bishop | Sixty-third | Sixty-fifth | 1,140 00 |
| 22067 | Superior avenue | Ninety-second | Ninety-third | 246 00 |
| 22068 | Lafin | Sixty-third | Sixty-fifth | 855 00 |
| 22069 | Justine | Sixty-third | Sixty-fifth | 988 00 |
| 22070 | Argyle | Clark | Evanston avenue | 1,729 00 |
| 22071 | Sixty-third | Centre avenue | Ashland avenue | 3,281 25 |
| 22131 | Beach avenue | North Kedzie avenue | North Homan avenue | 1,312 50 |
| 22193 | Peoria | Sixty-sixth | Sixty-seventh | 331 50 |
| 22194 | Bishop | Sixty-fifth | Sixty-seventh | 1,254 00 |
| 22195 | Loomis | Sixty-third | Sixty-fifth | 1,482 00 |
| 22253 | Marshfield avenue | Sixty-third | Sixty-fifth | 624 00 |
| 22254 | Union avenue | 118th | 119th | 390 00 |
| 22255 | Sixty-seventh | Halsted | Morgan | 225 50 |
| 22256 | Sheridan avenue | Grand avenue | North avenue | 1,463 00 |
| 22289 | Sangamon | Sixty-sixth | Sixty-seventh | 205 00 |
| 22342 | Diversey avenue | Milwaukee avenue | Crawford avenue | 2,788 00 |
| Total | | | | \$ 86,507 50 |

SEWERS.

| No. of War'nt | NAME OF STREET | FROM | TO | AMOUNT |
|------------------|-------------------------------------|--------------------|----------------------------|-------------|
| 21400 | Lexington | Kedzie avenue | Central Park avenue | \$ 4,091 55 |
| 21406 | West Chicago avenue | System | ..... | 39,267 10 |
| 21493 | North Fifty-fifth avenue | Irving Park avenue | Byron | 1,027 42 |
| 21495 | South Normal Parkway | Butler | C. R. I. & P. Ry. | 1,852 72 |
| 21515 | Sheridan road | Foster avenue | Bryn Mawr avenue | 3,106 64 |
| 21543 | Eighty-eighth | Halsted | Beverly avenue | 31,655 10 |
| 21546 | Evars avenue | Fifty-first | Grand Trunk Ry | 1,811 51 |
| 21562 | Ninety-ninth | Avenue K | Avenue L, etc. | 2,286 18 |
| 21563 | Avenue L | P, Ft. W. & C. Ry | 102nd | 2,614 15 |
| 21598 | Forty-fifth | System | ..... | 542,151 53 |
| 21602 | Hirsch | Spaulding avenue | Homan avenue | 993 45 |
| 21603 | Loomis | West Fifty-ninth | 270 feet north | 393 30 |
| 21604 | Bishop | West Fifty-ninth | 260 feet north | 384 90 |
| 21605 | Lafin | West Fifty-ninth | 260 feet north | 398 55 |
| 21608 | Ridge avenue | Thome avenue | Pratt avenue | 6,472 24 |
| 21615 | West Fifty-seventh (Justine) system | Lafin (Bishop) | Loomis | 15,648 29 |
| 21621 | West Huron | St. Louis avenue | Drake avenue | 366 00 |
| 21635 | Marshfield avenue | Diversey avenue | Wrightwood avenue | 425 06 |
| 21636 | Elizabeth | West Fifty-ninth | 277 feet north | 413 51 |
| 21637 | Ada | West Fifty-ninth | 270 feet north | 354 45 |
| 21640 | Wellington | Albany avenue | Humboldt avenue | 1,092 00 |
| 21642 | Follanshee | Humboldt boulevard | Sacramento avenue | 1,450 50 |
| 21643 | Whipple | Avondale avenue | Wellington | 1,050 77 |
| 21649 | Moffatt | Albany avenue | 230 feet west | 348 15 |
| 21650 | Homer | Albany avenue | 230 feet west | 360 23 |
| 21651 | Justine | West Fifty-ninth | 260 feet north | 398 55 |
| 21652 | Ada | Garfield boulevard | Englewood Connecting R. R. | 2,535 23 |
| 21653 | Boulevard way | West Twenty-fifth | Douglas Park boulevard | 573 90 |
| 21654 | Monticello avenue | North avenue | Hirsch | 1,845 48 |
| 21670 | Catalpa court | Fullerton avenue | Humboldt Park boulevard | 1,113 84 |
| 21730 | North Forty-first avenue | Montrose avenue | Berteau avenue | 2,137 49 |
| 21731 | North Forty-second court | Linden avenue | Berteau avenue | 3,127 90 |
| 21732 | North Forty-second avenue | Linden avenue | Berteau avenue | 2,609 13 |
| 21736 | Coles avenue | Seventy-third | Seventy-fifth | 3,292 70 |
| 21745 | Armour avenue | West Fifty-ninth | 522 feet north | 766 31 |
| 21748 | Leavitt | Archer avenue | Thirty-fifth place | 366 00 |

| | | | | |
|-------|----------------------------|------------------------------|-----------------------------------|-----------|
| 21749 | Hoynes avenue. | Thirty-fourth | Thirty-fifth. | 1,070 16 |
| 21750 | Berteau avenue | Robey | 467 feet west | 744 00 |
| 21751 | Avenue M | Ninety-fifth | B. & O. R. | 4,217 10 |
| 21752 | Avenue M | 100th. | P., Ft. W. & C. Ry | 868 15 |
| 21753 | Phillips | Green | 117 feet East | 255 75 |
| 21767 | West 117th system. | LaSalle | Perry avenue, etc | 2,898 10 |
| 21810 | West 102nd | Prospect avenue | Wood | 1,804 70 |
| 21817 | Winchester avenue. | Eighty-seventh | Eighty-eighth | 1,369 18 |
| 21819 | Forty-third avenue. | Wilson avenue | Berteau avenue | 4,800 85 |
| 21826 | North Forty-first court | Montrose avenue. | Berteau avenue | 1,921 47 |
| 21827 | Oakley avenue. | Illinois and Michigan canal. | Thirty-third, etc. | 1,314 80 |
| 21835 | Central Park avenue | Diversey | Wrightwood avenue. | 2,198 70 |
| 21845 | West Sixty-first, etc | Ashtland avenue. | Marshfield avenue | 4,306 94 |
| 21853 | Ridgeway avenue. | Fullerton avenue. | Wrightwood avenue. | 2,216 26 |
| 21854 | Ballou | Diversey avenue | Wrightwood avenue. | 2,256 55 |
| 21855 | Wrightwood avenue | Sawyer avenue. | Hamlin avenue | 4,425 61 |
| 21857 | Leavitt | Sunnyside avenue. | Wilson avenue | 872 24 |
| 21858 | West 118th. | System | | 2,721 27 |
| 21859 | Washenaw avenue. | System | | 6,110 74 |
| 21862 | Douglas boulevard | West Twenty-second | Boulevard way. | 2,580 24 |
| 21884 | Scipp avenue. | Seventy-first. | Seventy-third. | 3,774 59 |
| 21894 | 103rd. | Calumet river. | P., Ft. W. & C. Ry | 14,521 70 |
| 21901 | Fullerton avenue | North Fortieth avenue. | North Forty-sixth avenue | 12,039 53 |
| 21903 | Prospect avenue | West Ninety-ninth | West 107th | 11,816 08 |
| 21911 | Thoop | Alley south of Fifty-fifth | Englewood Connecting R. R. | 2,379 89 |
| 21915 | North Forty-fourth avenue. | West Wilson avenue. | Avondale avenue, etc. | 4,841 05 |
| 21935 | Monticello avenue | West North avenue | Bloomington road | 2,148 67 |
| 21938 | Turner avenue. | West Twenty-sixth | West Twenty-seventh | 811 73 |
| 21971 | Hancock avenue. | West Diversey | Alley N. of W. Wrightwood avenue. | 1,837 47 |
| 21972 | South Marshfield avenue | West Sixty-fourth | West Sixty-sixth. | 1,909 06 |
| 21975 | Eberly avenue. | West Irving Park avenue | West Montrose avenue | 4,103 40 |
| 21976 | North Kimball avenue | West Irving Park avenue | West Montrose avenue | 4,318 00 |
| 22004 | North Bernard avenue. | West Irving Park avenue | West Montrose avenue | 4,170 16 |
| 22031 | North Forty-fifth court | West Seventy-third | Northern terminus | 1,958 88 |
| 22066 | Union avenue | | 478 feet south of Seventy-fourth | 1,559 38 |
| 22082 | West Forty-first. | Butler | 447 feet east. | 807 00 |
| 22083 | Elizabeth | Alley south of Fifty-fifth | Fifty-seventh | 1,386 84 |
| 22146 | Avenue M | 102nd. | 104th | 2,270 88 |
| 22147 | Avenue L. | 102nd. | 299 feet south of 104th | 2,223 78 |
| 22161 | West Eighteenth place | South Wood. | West 195 feet. | 297 49 |
| 22162 | Princeton avenue | Alley south of 118th | 119th | 748 20 |
| 22163 | Harvard avenue | Alley south of 118th | 119th. | 748 20 |

SEWERS—CONTINUED.

| No. of War't | NAME OF STREET | FROM | TO | AMOUNT |
|-----------------|--------------------------|---------------------------|---------------------------------------|---------------|
| 22164 | Dickens avenue..... | Kimball avenue..... | Ballou..... | \$ 1,119 67 |
| 22165 | Stewart avenue..... | Alley south of 118th..... | 119th..... | 748 10 |
| 22166 | Yale avenue..... | Alley south of 118th..... | 119th..... | 748 20 |
| 22167 | Seventy-second..... | Ingleside avenue..... | Alley east of Ingleside avenue..... | 177 00 |
| 22168 | Western avenue..... | Winnemac avenue..... | Foster avenue..... | 1,757 44 |
| 22169 | Central Park avenue..... | Fullerton avenue..... | Alley south of Wrightwood avenue..... | 1,738 51 |
| 22170 | 118th..... | Lowe avenue..... | Union avenue..... | 363 90 |
| 22197 | Butler..... | Alley south of 116th..... | 118th..... | 1,861 15 |
| 22257 | Parnell avenue..... | Alley south of 116th..... | 118th..... | 1,861 15 |
| 22258 | Eggleston avenue..... | Alley south of 116th..... | 118th..... | 1,861 15 |
| 22259 | 117th..... | Eggleston avenue..... | Wallace..... | 1,168 40 |
| 22260 | 118th..... | Wentworth avenue..... | Wallace..... | 4,107 56 |
| 22261 | School..... | Humboldt..... | West 107 feet..... | 188 55 |
| 22262 | May..... | Sixty-ninth..... | Seventieth..... | 983 35 |
| 22263 | Ninety-first..... | Escanaba avenue..... | Muskegon avenue..... | 414 30 |
| 22264 | Loomis..... | Sixty-ninth..... | Seventieth..... | 1,073 71 |
| 22265 | Belden avenue..... | Kimball avenue..... | 40 feet west of Spaulding avenue..... | 578 63 |
| 22266 | McLean avenue..... | Sawyer avenue..... | Alley west of Kedzie avenue..... | 544 50 |
| 22267 | Fifty-second place..... | Princeton avenue..... | 275 feet west..... | 389 07 |
| 22268 | Sixty-second..... | May..... | Alley east..... | 218 74 |
| 22269 | Seventy-first..... | State..... | 180 feet east of Vincennes road..... | 905 29 |
| 22270 | Ashland avenue..... | Sixty-third..... | Sixty-fifth..... | 2,079 18 |
| 22271 | Pensacola avenue..... | Western avenue..... | Campbell avenue..... | 1,286 60 |
| | Total..... | | | \$ 834,080 77 |

DRAINS.

| No. of War't | NAME OF STREET | FROM | TO | AMOUNT |
|-----------------|-----------------------|--------------------------|--------------------|-----------|
| 21369 | Evergreen avenue..... | Kedzie avenue..... | Homan avenue..... | \$ 984 00 |
| 21370 | Lawndale avenue..... | West Chicago avenue..... | West Division..... | 1,898 00 |
| 21371 | Beach avenue..... | Kedzie avenue..... | Homan avenue..... | 948 00 |

| | | | | |
|-------|-------------------------|------------------------------|-----------------------------|----------|
| 21372 | Olga | Grace | Waveland avenue | 390 00 |
| 21373 | Fiftieth place | Morgan | Union | 781 00 |
| 21374 | Hirsch | Kedzie avenue | Homan avenue | 876 00 |
| 21375 | Ward | Waveland avenue | Addison | 289 00 |
| 21376 | Evergreen avenue | Rockwell | California avenue | 445 50 |
| 21377 | Crystal | Kedzie avenue | Homan avenue | 600 00 |
| 21378 | Asland avenue | Balmoral avenue | Winneconne avenue | 1,452 00 |
| 21379 | Cornelia | Rockwell | Washenaw avenue | 575 00 |
| 21380 | Catalpa place | Humboldt boulevard | Edgewood avenue | 806 00 |
| 21381 | South Ada | Forty-seventh | Forty-ninth | 322 00 |
| 21382 | South Elizabeth | Forty-seventh | Forty-ninth | 204 00 |
| 21383 | West Superior | Washenaw avenue | California avenue | 462 50 |
| 21384 | Cromwell | Milwaukee avenue | Fullerton avenue | 406 00 |
| 21385 | Spaulding avenue | Grand avenue | North avenue | 1,332 00 |
| 21386 | Lawndale avenue | West Kinzie | West Ohio | 816 00 |
| 21387 | Greenwood avenue | Seventy-first | Seventy-fifth | 1,157 00 |
| 21388 | Berlin | California avenue | Talman avenue | 780 00 |
| 21389 | Rhine | Milwaukee avenue | Talman avenue | 650 00 |
| 21390 | Lexington avenue | Seventy-first | Seventy-fourth | 1,261 00 |
| 21391 | Dobson avenue | Central Park boulevard | Seventy-third | 741 00 |
| 21392 | Spaulding avenue | Springfield avenue | West Ohio | 338 00 |
| 21400 | West Ohio | Seventy-second | North Fortieth avenue | 208 00 |
| 21441 | Jackson avenue | South Park avenue | Seventy-fifth | 1,008 00 |
| 21442 | Sixty-ninth | Newport avenue | Calumet avenue | 135 00 |
| 21443 | Seminary avenue | Exchange avenue | Eddy | 208 00 |
| 21444 | Ninety-first | Seventy-third | Commercial avenue | 208 00 |
| 21454 | Drexel avenue | Seventy-third | Seventy-fifth | 840 00 |
| 21455 | Ingleside avenue | Seventy-first | South Chicago avenue | 499 50 |
| 21456 | Ingleside avenue | Seventy-third | Seventy-fifth | 756 00 |
| 21461 | Humboldt | Division | Cornelia | 564 00 |
| 21462 | Humboldt | Chicago avenue | Cornelia | 552 00 |
| 21463 | Humboldt | Diversey avenue | C. & N-W. Ry. | 1,118 00 |
| 21464 | Avers avenue | North avenue | Grand avenue | 1,495 00 |
| 21465 | Winchester avenue | Foster avenue | Winneconne avenue | 703 00 |
| 21466 | Robey | Foster avenue | Winneconne avenue | 793 00 |
| 21467 | Lincoln | Foster avenue | Winneconne avenue | 676 00 |
| 21468 | Thomas | Wood | Leavitt | 572 00 |
| 21473 | Sawyer avenue | C. & N-W. Ry. | Chicago avenue | 1,417 00 |
| 21474 | Drexel avenue | Seventy-first | South Chicago avenue | 312 00 |
| 21475 | Langley avenue | Seventy-first | Seventy-fifth | 1,416 00 |
| 21476 | Seventy-fourth | St. Lawrence avenue | Ellis avenue | 210 00 |
| 21477 | Seventy-second | Ingleside avenue | I. C. R. R. | 600 00 |

DRAINS—CONTINUED.

| No. of War'nt | NAME OF STREET | FROM | TO | AMOUNT |
|------------------|---------------------------|---------------------------|-----------------------------|-------------|
| 21478 | Evans avenue..... | Seventy-first..... | Seventy-fifth..... | \$ 1,044 00 |
| 21479 | Seventy-third..... | South Chicago avenue..... | I. C. R. R..... | 480 00 |
| 21480 | Ellis avenue..... | Seventy-first..... | Seventy-third..... | 723 00 |
| 21481 | St. Lawrence avenue..... | Seventy-third..... | Seventy-fifth..... | 900 00 |
| 21482 | Forty-eighth..... | Robey..... | Leavitt..... | 624 00 |
| 21483 | Seeley avenue..... | Forty-seventh..... | Forty-ninth..... | 1,020 00 |
| 21484 | Sixty eighth..... | Halsted..... | Morgan..... | 391 00 |
| 21485 | Forty-seventh place..... | Morgan..... | Centre avenue..... | 506 00 |
| 21486 | Peoria..... | Sixty-sixth..... | Sixty-seventh..... | 312 00 |
| 21487 | Woodlawn avenue..... | Seventy-first..... | Seventy-fifth..... | 1,176 00 |
| 21488 | Seventy-first place..... | Woodlawn avenue..... | I. C. R. R..... | 387 50 |
| 21489 | Sangamon..... | Sixty-sixth..... | Sixty-seventh..... | 260 00 |
| 21490 | Paulina..... | Forty-seventh..... | Forty-ninth..... | 300 00 |
| 21491 | Fiftieth..... | Morgan..... | Ashland avenue..... | 216 00 |
| 21492 | Morgan..... | Sixty-fifth..... | Sixty-ninth..... | 1,430 00 |
| 21505 | State..... | Seventy-first..... | Seventy-fifth..... | 3,282 00 |
| 21529 | Fifty-fourth place..... | Wallace..... | Union..... | 312 50 |
| 21530 | West Congress..... | Homan avenue..... | Central Park avenue..... | 504 00 |
| 21531 | Sixty-second..... | Madison avenue..... | I. C. R. R..... | 208 00 |
| 21534 | Champlain avenue..... | Seventy-first..... | Seventy-fifth..... | 1,920 00 |
| 21535 | 120th..... | Halsted..... | Butler..... | 616 00 |
| 21539 | Otto..... | Ashland avenue..... | C., E. & L. S. R. R..... | 418 50 |
| 21541 | South Chicago avenue..... | South Park avenue..... | Seventy-fifth..... | 2,641 25 |
| 21550 | Fletcher..... | Racine avenue..... | Ferry..... | 445 50 |
| 21551 | Washtenaw avenue..... | West Chicago avenue..... | Grand avenue..... | 238 00 |
| 21552 | West Twentieth place..... | Johnson..... | Sangamon..... | 160 00 |
| 21556 | Lafin..... | Forty-ninth..... | Fifty-first..... | 287 50 |
| 21557 | Ada..... | Fiftieth..... | Fifty-first..... | 192 00 |
| 21558 | Carmen avenue..... | Clark..... | Southport avenue..... | 650 00 |
| 21559 | Elizabeth..... | Fiftieth..... | Fifty-first..... | 162 50 |
| 21560 | Paulina..... | Bertean avenue..... | Irving Park boulevard..... | 728 00 |
| 21567 | Broom..... | Grand avenue..... | West Ohio..... | 115 00 |
| 21568 | Thirty-third..... | Halsted..... | Laurel..... | 378 00 |
| 21572 | Turner avenue..... | West Twelfth..... | Douglas Park boulevard..... | 480 00 |
| 21573 | Sixty-third..... | Centre avenue..... | Ashland avenue..... | 2,014 50 |
| 21582 | La Salle..... | Thirty-ninth..... | Fortieth..... | 208 00 |

| | | | | |
|-------|---------------------------------|----------------------------|----------------------------------|--------------|
| 21032 | Frankfort..... | Hoyle avenue..... | Leavitt..... | 196 00 |
| 21033 | Forty-eighth avenue..... | West Madison..... | West Chicago avenue..... | 2,254 00 |
| 21034 | McLean avenue..... | Kimball..... | Hamlin avenue..... | 1,572 00 |
| 21059 | Sheridan road..... | Bryn Mawr avenue..... | North Fifty-ninth..... | 1,056 00 |
| 21763 | West Twenty-third place..... | California avenue..... | Douglas Park boulevard..... | 162 00 |
| 21771 | Diversey..... | Milwaukee avenue..... | Crawford avenue..... | 2,960 00 |
| 21890 | Drake avenue..... | Chicago avenue..... | Ohio..... | 1,398 00 |
| 21906 | Evanson avenue..... | Foster avenue..... | Montrose boulevard..... | 3,052 50 |
| 21916 | West Harrison..... | South Fortieth avenue..... | South Forty-sixth avenue..... | 2,749 50 |
| 21917 | South Oakley avenue..... | Thirty-fifth..... | Illinois and Michigan canal..... | 1,236 00 |
| 21925 | Pierce..... | North Kedzie avenue..... | North Homan avenue..... | 350 00 |
| 21949 | Seventy-first..... | State..... | Perry avenue..... | 319 00 |
| 22303 | Robey..... | Forty-seventh..... | Fifty-second..... | 2,021 00 |
| 22320 | East side of Sheridan road..... | Foster avenue..... | Bryn Mawr avenue..... | 1,152 00 |
| 22321 | Rice..... | Washtenaw avenue..... | Rockwell..... | 396 00 |
| 22351 | Stanley terrace..... | Jackson boulevard..... | Van Buren..... | 140 00 |
| 22352 | Ada..... | Fifty-ninth..... | Sixtieth..... | 163 03 |
| 22390 | Aberdeen..... | Sixty-seventh..... | Sixty-ninth..... | 888 00 |
| 22391 | Carpenter..... | Sixty-seventh..... | Sixty-ninth..... | 682 00 |
| 22392 | Champlain avenue..... | Sixty-third..... | Sixty-ninth..... | 2,463 25 |
| | Total..... | | | \$ 84,154 53 |

CEMENT SIDEWALKS.

| No. of Ward | NAME OF STREET | FROM | TO | AMOUNT |
|----------------|-------------------------|-------------------------|----------------------|-------------|
| 21393 | Lexington..... | Garfield boulevard..... | Crawford avenue..... | \$ 3,306 15 |
| 21404 | Loomis..... | Van Buren..... | Harrison..... | 731 90 |
| 21408 | Throop..... | Madison..... | Harrison..... | 4,230 40 |
| 21423 | Congress..... | Robey..... | Ogden avenue..... | 894 07 |
| 21542 | Twenty-third..... | Wabash avenue..... | I. C. R. R..... | 613 00 |
| 21553 | Seventy-fifth..... | Railroad avenue..... | Bond avenue..... | 346 80 |
| 21574 | Adams avenue..... | Seventy-third..... | Seventy-fifth..... | 804 70 |
| 21583 | Emerald avenue..... | Forty-third..... | Forty-seventh..... | 1,154 40 |
| 21589 | Jefferson avenue..... | Seventy-first..... | Seventy-third..... | 1,399 65 |
| 21612 | Lafin..... | Madison..... | Monroe..... | 944 50 |
| 21691 | Champlain avenue..... | Fiftieth..... | Fiftieth place..... | 717 60 |
| 21692 | Irving Park avenue..... | Halsted..... | Lake Shore..... | 1,657 50 |

CEMENT SIDEWALKS—CONTINUED.

| No. of War'nt | NAME OF STREET | FROM | TO | AMOUNT |
|------------------|-----------------------|---------------------|------------------|--------------|
| 21806 | Jefferson avenue | Fifty-fifth | Fifty-seventh | \$ 700 92 |
| 21816 | Forty-eighth | Prairie avenue | Indiana avenue | 225 40 |
| 21888 | Goehe | Astor | Lake Shore drive | 462 60 |
| 21899 | Sheffield avenue | Wellington | George | 751 40 |
| 21907 | Campbell avenue | Madison | Harrison | 1,302 50 |
| 21912 | Madison avenue | Seventy-third | Seventy-fifth | 2,188 75 |
| 21948 | Hawthorne place | Evanson avenue | Lake Shore drive | 204 40 |
| 22005 | Madison avenue | Seventy-first | Seventy-third | 1,788 42 |
| 22030 | Nutt (Kimbark) avenue | Seventy-first place | Seventy-third | 195 00 |
| 22038 | Champlain avenue | Forty-fifth | Forty-sixth | 147 50 |
| 22053 | Fiftieth | Michigan avenue | Grand boulevard | 1,337 96 |
| 22063 | Palmer | Sunnyside avenue | Wilson avenue | 210 00 |
| 22064 | Rossano | Sixty-sixth | Sixty-seventh | 417 20 |
| 22084 | Forty-second | Berkeley avenue | Ellis avenue | 93 80 |
| 22120 | Clement avenue | South Park avenue | Seventieth | 2,980 46 |
| 22139 | St. Lawrence avenue | Sixty-third | Sixty-seventh | 1,267 35 |
| 22140 | Vernon avenue | Sixty-ninth | Seventy-third | 2,266 76 |
| 22278 | Sawyer avenue | Twelfth | Fifteenth | 1,467 39 |
| | Total | | | \$ 34,808 48 |

PLANK SIDEWALKS.

| No. of War'nt | NAME OF STREET | FROM | TO | AMOUNT |
|------------------|----------------------|---------------------|-------------------|-----------|
| 21447 | Western avenue | Fulton | Park avenue | \$ 283 53 |
| 21448 | East Ravenswood Park | Cosgrove avenue | Graceland avenue | 522 60 |
| 21471 | Jackson | Forty-sixth | Forty-eighth | 298 20 |
| 21497 | Lake | Hamlin avenue | West Fortieth | 969 91 |
| 21518 | Seventy-first | Stony Island avenue | Cregier avenue | 282 56 |
| 21536 | Colfax avenue | Eighty-sixth | Eighty-seventh | 480 00 |
| 21584 | Kedzie avenue | Nineteenth | C., B. & Q. R. R. | 158 00 |
| 21585 | Argyle | Evanson avenue | Southport avenue | 124 00 |

| | | | | |
|-------|---------------------------|---------------------------|----------------------------|----------|
| 21586 | Joseph..... | Kedzie avenue..... | Grant..... | 669 57 |
| 21587 | Spaulding avenue..... | Joseph..... | Thirty-ninth..... | 124 80 |
| 21588 | Smith..... | Grant avenue..... | Rockwell..... | 181 65 |
| 21606 | Commercial avenue..... | Seventy-ninth..... | Baltimore avenue..... | 1,206 52 |
| 21607 | Buffalo avenue..... | Eighty-fourth..... | Eighty-sixth..... | 359 70 |
| 21620 | Champlain avenue..... | Burnside avenue..... | Ninety-fifth..... | 187 25 |
| 21666 | California avenue..... | Madison..... | Twelfth..... | 4,595 60 |
| 21671 | Western avenue..... | Belmont avenue..... | Roscoe..... | 86 90 |
| 21675 | Charles..... | 100th..... | 103d..... | 125 00 |
| 21676 | Thirty-fourth place..... | Morgan..... | Ullman..... | 464 10 |
| 21690 | Cottage Grove avenue..... | Eighty-ninth..... | Ninety-first..... | 422 94 |
| 21693 | 111th place..... | State..... | C. & E. I. R. R..... | 204 93 |
| 21694 | 105th..... | Avenue N..... | Avenue L..... | 152 04 |
| 21695 | 101st..... | Avenue L..... | Avenue N..... | 206 22 |
| 21696 | 106th..... | Avenue K..... | Avenue O..... | 442 52 |
| 21697 | Elston avenue..... | North avenue..... | Armitage avenue..... | 957 95 |
| 21699 | 110th..... | Michigan avenue..... | State..... | 202 02 |
| 21700 | Paulina..... | Byron..... | Webster avenue..... | 958 65 |
| 21701 | Parker avenue..... | Kimball avenue..... | Ballou..... | 229 40 |
| 21702 | Clinton..... | 101st..... | 103d..... | 350 76 |
| 21703 | Prospect avenue..... | Ninety-fifth..... | Ninety-seventh..... | 152 45 |
| 31704 | Seventy-seventh..... | Cottage Grove avenue..... | Greenwood avenue..... | 550 20 |
| 21705 | Central avenue..... | Eighty-second..... | Eighty-third..... | 142 38 |
| 21706 | Eighty-second..... | South Chicago avenue..... | Central avenue..... | 312 80 |
| 21707 | Lincoln avenue..... | Wellington..... | Belmont avenue..... | 493 60 |
| 21708 | Mentmore avenue..... | Ballou..... | Kimball avenue..... | 148 68 |
| 21709 | Jeffrey avenue..... | Jackson Park..... | Seventy-first..... | 229 40 |
| 21710 | Jefferson avenue..... | Franklin..... | Lawrence avenue..... | 196 98 |
| 21711 | Eightieth..... | Bond avenue..... | Arthur avenue..... | 134 10 |
| 21712 | Wabansia..... | Clybourn avenue..... | Chicago river..... | 122 40 |
| 21713 | Avenue L..... | Ninety-sixth..... | 106th..... | 677 16 |
| 21714 | Centre..... | Park avenue..... | Greenwood avenue..... | 213 36 |
| 21716 | Thirty-third place..... | Halsted..... | Morgan..... | 319 15 |
| 21717 | Farrell..... | Archer avenue..... | Kedzie..... | 805 86 |
| 21718 | Twelfth..... | Garfield boulevard..... | 106th..... | 362 34 |
| 21719 | Avenue N..... | 100th..... | Belden avenue..... | 200 76 |
| 21720 | Jefferson avenue..... | Humboldt avenue..... | Forty-ninth avenue..... | 240 54 |
| 21721 | Belden avenue..... | Jefferson avenue..... | North Fortieth avenue..... | 32 34 |
| 21722 | Costello avenue..... | Springfield avenue..... | Lombard..... | 202 86 |
| 21723 | Adams..... | Jefferson avenue..... | Fifty-second avenue..... | 542 52 |
| 21724 | Belden avenue..... | Forty-ninth court..... | Jefferson avenue..... | 180 00 |
| 21725 | Huntingdon..... | C., M. & St. P. Ry..... | | |

PLANK SIDEWALKS—CONTINUED.

| No. of War'nt | NAME OF STREET | FROM | TO | AMOUNT |
|------------------|---------------------------|--------------------------|--------------------------------------|-----------|
| 21727 | 110th | Wentworth avenue | Stewart avenue | \$ 377 85 |
| 21728 | Ninety-sixth | Avenue N | Avenue L | 154 56 |
| 21766 | De Kalb | Flournoy | Polk | 209 50 |
| 21782 | Byron | C. & E. R. R. | Sheffield avenue | 168 90 |
| 21805 | Champlain avenue | Archer avenue | Thirty-seventh | 551 20 |
| 21838 | Auburn avenue | Thirty-first | Thirty-third | 207 60 |
| 21843 | Cregier avenue | Sixty-ninth | Seventy-first | 210 00 |
| 21844 | Commercial avenue | Ninety-eighth | 102nd | 447 81 |
| 21847 | Colfax avenue | Eighty-eighth | Eighty-ninth | 99 20 |
| 21848 | Jackson avenue | Fifty-fifth | Fifty-sixth | 108 80 |
| 21875 | Kedzie avenue | California avenue | Rockwell | 173 95 |
| 21891 | Aberdeen | Archer avenue | Forty-ninth | 578 24 |
| 21897 | Sixty-first | Forty-seventh | Sixty-third | 1,628 43 |
| 21902 | Ellis avenue | Ellis avenue | Wharton avenue | 280 00 |
| 21934 | Carondelet avenue | Eighty-first | Eighty-second | 411 18 |
| 21936 | Forty-ninth avenue | 131st | Howard avenue | 355 32 |
| 21987 | Eighty-ninth | Iowa | Delaware | 88 40 |
| 21939 | Drexel avenue | Superior avenue | The Strand | 275 52 |
| 21940 | Butler | Eighty-fourth | Eighty-seventh | 318 50 |
| 21941 | Pennsylvania avenue | Nineteenth | C., R. I. & P. Ry | 40 00 |
| 21942 | Elizabeth avenue | Bloomington avenue | Armitage avenue | 340 89 |
| 21943 | Seventy-seventh | Sixty second | Sixty-third | 191 80 |
| 21944 | McAuley | Bond avenue | Railroad avenue | 294 00 |
| 21945 | Thirty-ninth | Wabasha avenue | Cortland | 243 60 |
| 21946 | Fifty-second avenue | California avenue | 221 feet west of Archer avenue | 140 85 |
| 21947 | Twenty-seventh | Lake | Madison | 284 24 |
| 21977 | Calumet avenue | Troy | Kedzie avenue | 79 20 |
| 22006 | Avenue M | Fifty-eighth | Sixty-first | 201 63 |
| 22007 | Armour avenue | Ninety-sixth | Sixty-third | 1,126 02 |
| 22008 | Indiana avenue | Thirty-fifth | 106th | 1,071 51 |
| 22009 | Christiana avenue | 110th | Thirty-sixth | 162 40 |
| 22010 | Austin avenue | Grand avenue | 111th | 109 20 |
| 22011 | Austin avenue | Campbell avenue | Division | 211 75 |
| 22016 | Twenty-seventh | Diversey | Oakley avenue | 257 60 |
| | | Whipple | Fullerton avenue | 809 16 |
| | | | Troy | 323 40 |

| | | | | |
|-------|------------------------------|---|------------------------------------|----------|
| 22021 | 101st | Wood | Prospect avenue | 140 00 |
| 22022 | Edwards avenue | Seventy-ninth | Eightieth | 225 40 |
| 22023 | Green Bay avenue | Eighty-ninth | Ninety-first | 222 25 |
| 22024 | Wabansia avenue | McCauley avenue (Forty-first court) | Forty-second (Keeney) avenue | 116 00 |
| 22025 | Hamlin avenue | Armitage avenue | Dickens avenue | 159 60 |
| 22027 | Ontario avenue | Ninetieth | South Chicago avenue | 472 85 |
| 22028 | Erie avenue | Ninety-second | South Chicago avenue | 820 00 |
| 22029 | Burnside avenue | Chaplain avenue | Cottage Grove avenue | 316 75 |
| 22032 | Herndon | Clybourn avenue | Fullerton avenue | 118 65 |
| 22033 | Eighty-fifth | Mackinaw avenue | Ontario avenue | 223 04 |
| 22034 | Eighty-ninth place | Cottage Grove avenue | Dauphin avenue | 163 80 |
| 22035 | West Nineteenth | Albany avenue | California avenue | 477 40 |
| 22036 | Cossitt | Franklin | Washington | 251 16 |
| 22039 | Charlton | Thirty-third | Thirty-fourth | 169 65 |
| 22040 | Ohio | Kedzie avenue | West Fortieth | 1,655 09 |
| 22041 | Peck court | Western avenue | Elm | 258 02 |
| 22042 | Manistee avenue | Eighty-seventh | Ninetieth | 645 48 |
| 22043 | Ninety-eighth | Avenue L | Avenue J | 164 00 |
| 22044 | Seventy-sixth | Coles avenue | Railroad avenue | 54 00 |
| 22045 | Ninety-sixth | Ewing avenue | Avenue L | 161 60 |
| 22046 | 101st | Avenue L | Indiana boulevard | 239 07 |
| 22047 | 103rd | Avenue L | Indiana boulevard | 317 10 |
| 22048 | Reynolds avenue | Seventy-ninth | Railroad avenue | 431 64 |
| 22049 | Bremen | Leavitt | Western avenue | 346 85 |
| 22050 | 105th | Prospect avenue | Washington avenue | 499 95 |
| 22051 | Ninetieth | Cottage Grove avenue | Dauphin avenue | 153 60 |
| 22054 | Eighty-ninth | Escanaba avenue | Muskegon avenue | 84 24 |
| 22055 | Lundy's Lane | Thirty-second | Thirty-third | 419 25 |
| 22056 | Belmont avenue | Robey | Lincoln avenue | 123 06 |
| 22057 | Parnell avenue | 100th | 102nd | 308 70 |
| 22058 | Rockwell | Huron | Grand avenue | 187 25 |
| 22059 | St. Louis avenue | Sixteenth | Ogden avenue | 281 40 |
| 22060 | Lincoln | Thirty-fourth | Thirty-fifth | 125 60 |
| 22061 | Muskegon avenue | Eighty-seventh | Eighty-ninth | 619 20 |
| 22062 | Harbor avenue | Ninety-second | Superior avenue | 71 20 |
| 22065 | Hart (Campbell) avenue | Thirty-ninth | Fortieth | 125 20 |
| 22072 | Poplar avenue | Twenty-ninth | Thirty-first | 172 90 |
| 22073 | Vernon avenue | Grace | Douglas | 131 04 |
| 22074 | Grant avenue | Wabansia avenue | Armitage avenue | 672 52 |
| 22085 | Norwood avenue | Western avenue | Sheridan avenue | 267 88 |
| 22086 | Ninety-fifth | Morgan | Logan avenue | 137 70 |
| 22087 | 101st place | Elizabeth | C., R. I. & P. Ry | 111 88 |

PLANK SIDEWALKS—CONTINUED.

| No. of Warrant | NAME OF STREET | FROM | TO | AMOUNT |
|-------------------|---------------------------|--------------------------|-----------------------------------|----------|
| 22088 | Thirty-fifth..... | Ullman | Laurel | 204 24 |
| 22089 | Thirty-third..... | Ashland avenue..... | Archer avenue | 422 10 |
| 22090 | Eighty-third..... | Illinois avenue..... | Bond avenue | 456 00 |
| 22108 | Webster avenue | Halsted | Lewis..... | 120 00 |
| 22111 | Thirty-seventh | Ashland avenue..... | Western terminus | 840 56 |
| 22112 | May..... | Fifty-first | Fifty-fourth | 161 00 |
| 22114 | Sacramento avenue..... | Irving Park avenue..... | Montrose avenue..... | 148 16 |
| 22115 | Grove | Sacramento avenue..... | Genesee..... | 156 45 |
| 22116 | Railroad avenue..... | Seventy-fourth..... | Seventy-ninth..... | 1,181 72 |
| 22117 | Seventy-sixth place | Coles avenue | Railroad avenue | 196 70 |
| 22118 | Robey | Addison avenue..... | Graceland avenue..... | 77 70 |
| 22119 | Thirty-first..... | Halsted | Morgan | 226 95 |
| 22121 | Prescott..... | Sacramento avenue..... | Genesee..... | 405 28 |
| 22123 | Florence avenue | Wood | Prospect avenue..... | 274 40 |
| 22124 | 105th..... | Avenue J..... | Avenue L..... | 81 06 |
| 22126 | Kedzie avenue | Thirty-eighth..... | Illinois and Michigan canal | 111 85 |
| 22145 | Linden avenue | Sixty-seventh..... | Sixty-ninth | 168 00 |
| 22171 | St. Elmo..... | Lincoln avenue | Wood | 68 80 |
| 22172 | Page..... | Fifty-third | Fifty-fourth | 425 49 |
| 22173 | Fifty-eighth | Eberhardt avenue | Central Park avenue..... | 200 00 |
| 12174 | Railroad avenue | Montrose boulevard | Hunting avenue | 109 50 |
| 22175 | St. Louis avenue..... | Sixteenth | Douglas boulevard | 488 58 |
| 22176 | Western avenue | North avenue | Bloomington road | 191 45 |
| 22177 | 106th..... | Leavitt..... | Bloomington road | 136 80 |
| 22178 | Wall | Thirty-first | Armada | 194 70 |
| 22179 | Spaulding avenue..... | Twelfth..... | James | 325 50 |
| 22180 | Whipple..... | Twenty-sixth..... | Douglas boulevard | 325 50 |
| 22198 | Ogden avenue..... | Trumbull avenue | 230 feet north | 88 40 |
| 22199 | Indiana avenue..... | 134th..... | Crawford avenue..... | 1,063 59 |
| 22200 | Bishop | Fiftieth..... | Calumet river | 176 30 |
| 22201 | Sixty-fifth court | Wright | Fifty-first | 144 90 |
| 22202 | 135th..... | Erie avenue | Honore | 250 25 |
| 22209 | Twenty-seventh | Bonney avenue | Buffalo avenue | 331 84 |
| 22210 | Houston avenue | 130th..... | Hamlin avenue..... | 102 50 |
| 22211 | Manistee avenue | Eightieth | Howard avenue..... | 1,069 28 |
| 22219 | Fifty-ninth | State | Eighty-first | 133 65 |
| | | | Ashland avenue..... | 3,768 12 |

| | | | | |
|-------|--------------------------|------------------------|----------------------------------|----------|
| 22222 | Wrightwood avenue..... | Logan square..... | Alley west of Sawyer avenue..... | 246 40 |
| 22224 | Twenty-sixth..... | Bonney avenue..... | Hamlin avenue..... | 83 70 |
| 22229 | Millard avenue..... | Twelfth..... | Douglas boulevard..... | 383 80 |
| 22230 | Division..... | Garden avenue..... | Crawford avenue..... | 191 66 |
| 22231 | Bonney avenue..... | Ogden avenue..... | Twenty-sixth..... | 719 36 |
| 22232 | Daley..... | Thirty-sixth..... | C. & A. R. R..... | 91 59 |
| 22233 | Atlantic..... | Forty-seventh..... | Fifty-fifth..... | 936 47 |
| 22234 | 119th..... | Kedzie avenue..... | Douglas Park boulevard..... | 310 40 |
| 22235 | Fifty-third..... | Ashland avenue..... | Wood..... | 276 80 |
| 22236 | Sangamon..... | Fifty-ninth..... | Sixty-third..... | 530 10 |
| 22237 | Grand avenue..... | Reed..... | Oak Park avenue..... | 118 35 |
| 22238 | Armitage avenue..... | Howard avenue..... | Vanetta avenue..... | 235 60 |
| 22239 | Palmer avenue..... | California avenue..... | Humboldt boulevard..... | 282 34 |
| 22240 | Columbus avenue..... | Greenwood avenue..... | Division..... | 664 70 |
| 22241 | Tracey avenue..... | Forty-seventh..... | Fiftieth..... | 564 90 |
| 22242 | Turner avenue..... | Twelfth..... | Douglas boulevard..... | 514 42 |
| 22243 | Whipple..... | Diversey..... | Franklin..... | 274 05 |
| 22244 | Charles..... | 100th place..... | 103rd..... | 340 34 |
| 22245 | Ashland avenue..... | Archer avenue..... | Illinois and Michigan canal..... | 972 80 |
| 22246 | McAlpine..... | Thirty-third..... | Thirty-fifth..... | 288 80 |
| 22247 | Pennsylvania avenue..... | North avenue..... | Bloomington road..... | 622 08 |
| 22248 | Fox..... | Thirty-first..... | Thirty-second place..... | 213 00 |
| 22249 | Seventy-fourth..... | Railroad avenue..... | Lake avenue..... | 354 09 |
| 22250 | May..... | Sixty-third..... | Sixty-seventh..... | 906 87 |
| 22272 | Lee avenue..... | California avenue..... | Kedzie avenue..... | 175 60 |
| 22273 | Elk Grove avenue..... | Armitage avenue..... | Hervey..... | 194 95 |
| 22274 | Thirty-first..... | Halsted..... | Laurel..... | 254 80 |
| 22275 | Lafin..... | Sixty-third..... | Sixty-fifth..... | 502 18 |
| 22276 | Armin avenue..... | Clark..... | East Ravenswood Park..... | 306 72 |
| 22277 | Bishop..... | Forty-seventh..... | Forty-eighth..... | 97 65 |
| 22279 | Sixty-first..... | Halsted..... | Ashland avenue..... | 1,323 00 |
| 22280 | Lawndale avenue..... | Ogden avenue..... | Twenty-ninth..... | 1,149 05 |
| 22281 | Halsted..... | Sixty-third..... | Sixty-ninth..... | 1,197 20 |
| 22282 | St. Louis avenue..... | Twenty-third..... | Twenty-seventh..... | 1,306 20 |
| 22283 | Leavitt..... | 106th..... | 107th..... | 201 20 |
| 22284 | Muskegon avenue..... | 103rd..... | 104th..... | 277 40 |
| 22285 | 131st..... | Carondelet avenue..... | Ontario avenue..... | 327 96 |
| 22286 | 182nd..... | Carondelet avenue..... | Superior avenue..... | 404 95 |
| 22287 | Ontario avenue..... | 130th..... | Howard avenue..... | 652 05 |
| 22297 | Albany avenue..... | Twenty-first..... | Twenty-second..... | 86 50 |
| 22298 | Kedzie avenue..... | Belmont avenue..... | Milwaukee avenue..... | 671 30 |
| 22299 | Moore..... | Wood..... | Pan Handle Ry..... | 736 30 |

PLANK SIDEWALKS—CONTINUED.

| No. of War'nt | NAME OF STREET | FROM | TO | AMOUNT |
|------------------|--------------------|-----------------------|-----------------------------------|--------|
| 22300 | Greenwood avenue. | Montrose boulevard | Lawrence avenue | 536 80 |
| 22301 | Polk | Halsted | Alley east of Blue Island avenue. | 119 00 |
| 22302 | California avenue. | Thirty eighth | Thirty-ninth | 110 70 |
| 22303 | Rice place | Twenty-second | Moore | 370 40 |
| 22304 | Clark avenue. | Western avenue. | Milton | 89 20 |
| 22305 | Rebecca. | Rockwell | Pan Handle Ry. | 144 50 |
| 22306 | Carpenter. | Fifty-fifth. | Sixty-third | 562 80 |
| 22307 | St. Louis avenue. | C. & N.-W. Ry. | Chicago avenue. | 888 00 |
| 22308 | Homan avenue. | Ogden avenue | Twenty-second | 230 80 |
| 22309 | Princeton avenue | Forty third place | Forty-fourth court | 415 47 |
| 22310 | Avenue L. | Ninety-fifth | 106th | 411 25 |
| 22311 | Lincoln | Thirty-fifth | Thirty-eighth | 322 65 |
| 22312 | Hoynes avenue | Montrose boulevard | Lawrence avenue | 214 20 |
| 22313 | Iowa | Fifty-first | Fifty-second | 272 52 |
| 22314 | Troy | Huron | Chicago avenue. | 208 95 |
| 22315 | Ewing | Desplaines | Halsted. | 316 40 |
| 22316 | Seventy-ninth | Vincennes avenue | Wright | 131 60 |
| 22317 | Ninety-fifth | Commercial avenue | South Chicago avenue. | 141 25 |
| 22318 | Ninety-sixth. | Commercial avenue | P., Ft. W. & C. Ry. | 355 20 |
| 22319 | Seventh avenue. | Ninety-seventh | Ninety-ninth | 327 25 |
| 22320 | Sanford | Pacific avenue | City limits | 90 90 |
| 22321 | Ninety-first | Green Bay avenue | Exchange avenue | 355 50 |
| 22322 | Longwood avenue | Ninety ninth | 101st place. | 451 15 |
| 22323 | Delaware | Forty-eighth avenue | Fiftieth avenue. | 163 80 |
| 22324 | Green Bay avenue. | 133rd | 134th | 172 00 |
| 22325 | 119th. | Peoria | Pan Handle Ry. | 267 05 |
| 22326 | Howard avenue | Carondelet avenue | 136th | 704 20 |
| 22327 | Seventy-second. | Cottage Grove avenue. | Evans avenue | 66 15 |
| 22328 | Springer avenue. | Laurel | Waterville | 553 00 |
| 22329 | The Strand | Eighty ninth | Harbor avenue | 455 20 |
| 22330 | 133rd. | Carondelet avenue | P., Ft. W. & C. Ry | 553 00 |
| 22331 | 132nd | Ontario avenue | Buffalo avenue | 173 60 |
| 22332 | Superior avenue | 133rd. | 136th. | 313 60 |
| 22333 | Buffalo avenue | 133rd | 136th. | 320 40 |
| 22334 | Sixty-second | Wentworth avenue. | La Salle | 213 30 |
| 22335 | Eighty-seventh | Halsted. | C., R. I. & P. Ry. | 71 75 |

GAS LAMP POSTS.

| No. of War'nt | No. of Posts | NAME OF STREET | FROM | TO | AMOUNT |
|---------------|--------------|---------------------------|---------------------------|--------------------------|--------------|
| 22336 | 6 | North Irving avenue | School | Roscoe | 189 00 |
| 22337 | 8 | Herndon | Melrose | Roscoe | 252 00 |
| 22338 | 13 | Addison avenue | Lincoln avenue | North Robey | 409 50 |
| 22339 | 23 L. P. & { | North Albany avenue | Humboldt boulevard | Belmont avenue | 1,119 50 |
| 22340 | 24 con. | Park avenue | North Forty-fourth avenue | North Forty-sixth avenue | 656 50 |
| 21354 | 7 | Lexington | South Fortieth avenue | South Forty-first avenue | 230 50 |
| 21355 | 5 | Eightieth court | Houston avenue | Exchange avenue | 157 50 |
| 21356 | 2 | West Thirty-third place | Ashland avenue | 200 feet west | 68 00 |
| 21357 | 23 | Escanaba avenue | Eighty seventh | Ninety-first | 709 50 |
| 21358 | 25 | South Fairfield avenue | West Sixteenth | West Twenty-second | 762 50 |
| 21359 | 2 | Armitage avenue | Elston avenue | Mendell | 68 00 |
| 21360 | 2 | North Carpenter | Milwaukee avenue | West Chicago avenue | 68 00 |
| 21361 | 15 | Cornelia | North Rockwell | Western avenue | 472 50 |
| 21362 | 22 | Bloom | Thirty-fifth | Thirty eighth | 657 70 |
| 21363 | 22 | Lincoln | Thirty-fifth | Thirty eighth | 657 70 |
| 21364 | 13 | Sixty-second | Greenwood avenue | Madison avenue | 409 50 |
| 21365 | 14 | Augusta | California avenue | Rockwell | 441 00 |
| 21366 | 45 | California avenue | Belmont avenue | Humboldt boulevard | 1,372 50 |
| 21367 | 9 | Seventy-ninth | Bond avenue | Commercial avenue | 283 50 |
| 21368 | 8 | Augusta | Rockwell | Campbell avenue | 252 00 |
| 21369 | 2 | Seventieth | Kimbark avenue | Chauncey avenue | 65 50 |
| 21370 | 5 | Sixty-ninth | I. C. R. | Chauncey avenue | 157 50 |
| 21371 | 18 | Thirty-ninth | Cottage Grove avenue | State | 771 00 |
| 21372 | 17 | North Forty-eighth avenue | Indiana | Fulton | 553 50 |
| 21373 | 3 | Lake View avenue | Roslyn place | Arlington place | 101 00 |
| 21591 | | | | | |
| Total. | | | | | \$ 93,804 84 |

111th.....
 State.....
 Eighty-first.....
 South Chicago avenue.....
 Ninetieth.....
 Ninety-third.....
 C., R. I. & P. Ry.....
 C. & A. R. R.....
 Eighty-first.....

512 80
 180 80
 260 40
 187 25
 185 76
 187 60

C. & E. I. R. R.....
 South Chicago avenue.....
 Ninety-third.....
 C., R. I. & P. Ry.....
 C. & A. R. R.....
 Eighty-first.....

GAS LAMP POSTS—CONTINUED.

| No. of Warrant | No. of Posts | NAME OF STREET | FROM | TO | AMOUNT |
|-------------------|-----------------|-------------------------|--------------------------|-------------------------------|-----------|
| 21592 | 4 | Seventy-fourth | Bond avenue | Coles avenue | \$ 130 00 |
| 21593 | 3 | South Chicago avenue | Exchange avenue | 362 feet northwest | 101 00 |
| 21613 | 2 | Fifty-second | Madison avenue | Hibbard avenue | 65 50 |
| 21614 | 4 | Thirty-fifth | Centre avenue | South branch of Chicago river | 128 50 |
| 21616 | 4 | Seventy-fifth place | Railroad avenue | Coles avenue | 128 50 |
| 21617 | 3 | Seventy-eighth | Bond avenue | Coles avenue | 99 50 |
| 21618 | 4 | Seventy-seventh place | Railroad avenue | Coles avenue | 128 50 |
| 21619 | 15 | Coles avenue | Seventy-seventh | Cheltenham place | 472 50 |
| 21638 | 21 | Lake | North Forty-sixth avenue | North Forty-eighth avenue | 656 50 |
| 21647 | 14 | Kimberk avenue | Sixty-ninth | Seventy-first | 441 00 |
| 21648 | 3 | Seventy first | Woodlawn avenue | I. C. R. R. | 97 00 |
| 21655 | 14 | Chauncey avenue | Sixty-ninth | Seventy-first | 441 00 |
| 21657 | 4 | Seventy-third place | Eastern terminus | Railroad avenue | 91 83 |
| 21689 | 6 | West Sixty-first | Morgan | Centre avenue | 189 00 |
| 21726 | 13 | Cottage Grove avenue | Sixty-third | Sixty-fifth | 416 00 |
| 21737 | 7 | High | Fullerton avenue | Dunning | 220 50 |
| 21738 | 4 | Newport avenue | Wood | Lincoln avenue | 128 50 |
| 21739 | 3 | Montrose avenue | Halsted | Lake Michigan | 99 50 |
| 21740 | 13 | Elizabeth | Forty-seventh | Forty-ninth | 409 50 |
| 21772 | 3 | Gross avenue | Belmont avenue | Melrose | 101 00 |
| 21790 | 9 | West Sixty-seventh | Morgan | Halsted | 283 50 |
| 21791 | 21 | Sangamon | Sixty-sixth | Sixty-ninth | 656 50 |
| 21792 | 27 | Halsted | Seventy-first | Seventy fifth | 815 50 |
| 21793 | 11 | West Forty-eighth place | Halsted | Wallace | 346 50 |
| 21794 | 9 | West Sixty-eighth | Halsted | Morgan | 283 50 |
| 21795 | 12 | Lafin | Forty-ninth | Fifty-first | 378 00 |
| 21796 | 13 | Ada | Forty-seventh | Forty-ninth | 409 50 |
| 21797 | 14 | Green | Sixty-seventh | Sixty-ninth | 441 00 |
| 21798 | 7 | Lafin | Forty-sixth | Forty-seventh | 220 50 |
| 21799 | 7 | Morgan | Sixty-eighth | Sixty-ninth | 220 50 |
| 21801 | 6 | Lunt avenue | Ridge road | Robey | 189 00 |
| 21839 | 24 | Marshfield avenue | West Forty-seventh | West Fifty-first | 736 00 |
| 21840 | 11 | Carmen avenue | North Clark | Southport avenue | 346 50 |
| 21841 | 6 | Lowie avenue | West Fifty-ninth | West Sixtieth | 189 00 |
| 21849 | 9 | Homan avenue | West Lake | Kinzie | 288 00 |
| 21850 | 9 | Fifty-seventh | Halsted | Morgan | 288 00 |

| | | | | | |
|-------|----|----------------------------------|----------------------------|--------------------------|----------|
| 21861 | 3 | Spaulding avenue. | Scott | Van Buren | 101 00 |
| 21863 | 14 | West Van Buren | Kedzie avenue. | Homan avenue | 448 00 |
| 21868 | 63 | West Chicago avenue | Kedzie avenue | West Fortieth | 1,953 00 |
| 21869 | 6 | Fifty-ninth | Indiana avenue | Calumet avenue | 192 00 |
| 21870 | 17 | Indiana | St. Clair | Lake Michigan | 544 00 |
| 21889 | 86 | Thirty fifth. | Western avenue. | Chicago river | 2,329 33 |
| 21892 | 27 | Bishop | Fifty-first | Fifty-fifth | 837 00 |
| 21896 | 70 | West Madison | Fortieth | Forty-sixth | 2,170 00 |
| 21910 | 35 | Lunt avenue | North Ashland avenue. | Lake Michigan | 1,014 76 |
| 21920 | 13 | West Fifty-third | Morgan | Halsted | 409 50 |
| 21926 | 23 | Washtenaw avenue | Jackson | Washington boulevard. | 594 50 |
| 21992 | 25 | West Van Buren | South Forty-sixth avenue | South Forty-third avenue | 787 50 |
| 21993 | 13 | Marshfield avenue | West Forty-fifth | West Forty-seventh | 409 50 |
| 21994 | 13 | Bishop | West Sixty-third | West Sixty-fifth | 409 50 |
| 21995 | 13 | Lafin | West Sixty-third | West Sixty-fifth | 409 50 |
| 21996 | 13 | South Hermitage (Page) avenue. | West Forty-fifth | West Forty-seventh | 409 50 |
| 21997 | 13 | South Paulina | West Forty-fifth | West Sixty-sixth | 128 50 |
| 21998 | 4 | Emerald (Regina) avenue | West Sixty-fifth | West Sixty-sixth | 630 00 |
| 21999 | 20 | South Marshfield (Dreyer) ave. | West Sixty-second | West Sixty-second | 99 50 |
| 22000 | 3 | Lowe (Sherman) avenue. | Root | West Forty-third | 252 00 |
| 22001 | 8 | Union avenue | Root | West Eightieth | 189 00 |
| 22003 | 6 | Union avenue | West Seventy-ninth | Houston avenue | 157 50 |
| 22012 | 5 | Eighty-first | Exchange avenue | West Sixty-fifth | 409 50 |
| 22015 | 13 | Justine | West Sixty-third | South Albany avenue | 189 00 |
| 22017 | 6 | West Fourteenth (Collins) place. | South Kedzie avenue | South Albany avenue | 189 00 |
| 22018 | 6 | Carlisle place. | South Kedzie avenue. | South Wood | 189 00 |
| 22019 | 6 | West Twenty-third (Moore) | South Lincoln | Central Park avenue | 1,093 00 |
| 22020 | 36 | Flournoy | South Albany avenue | Sixty seventh | 850 50 |
| 22091 | 27 | May | Sixty-third | Forty-third | 850 50 |
| 22092 | 27 | Wood | Forty-seventh | Forty-third | 850 50 |
| 22093 | 27 | Honore | Forty-third | Forty-seventh | 58 00 |
| 22094 | 2 | Chanay | Point | 125 feet north | 108 50 |
| 22095 | 4 | South Fortieth court | Park avenue. | Randolph | 108 50 |
| 22096 | 4 | Ems | North Maplewood avenue | Powell avenue. | 159 00 |
| 22097 | 6 | North Fairfield avenue | Cortland. | Armitage avenue. | 159 00 |
| 22098 | 6 | Crossing | North Paulina | C. & N.-W Ry. | 159 00 |
| 22099 | 7 | West Twentieth | South Washtenaw avenue | South Rockwell | 185 50 |
| 22100 | 7 | West Twenty-fifth | Leavitt | Hoyle avenue. | 185 50 |
| 22101 | 12 | Moffat. | Rockwell | North Western avenue | 318 00 |
| 22102 | 15 | Sawyer avenue | Fullerton avenue | Wrightwood avenue | 397 50 |
| 22141 | 15 | West Twelfth | South Forty-second avenue. | South Fortieth avenue | 397 50 |
| 22142 | 32 | West Twenty-third | South Lincoln. | South Western avenue | 848 00 |

GAS LAMP POSTS—CONTINUED.

| No. of W'ant | No. of Posts | NAME OF STREET | FROM | TO | AMOUNT |
|-----------------|----------------------------------|-----------------------------------|------------------------------|-----------------------------|--------------|
| 22143 | 45 | North Kedzie avenue | Logan Square | West Belmont avenue | \$ 1,193 50 |
| 22144 | 48 | North Forty-third (Howard) ave. | West North avenue | Humboldt avenue | 1,272 00 |
| 22150 | 8 | Berencie avenue | North Robey | Lincoln avenue | 124 50 |
| 22151 | 10 | Morse avenue | Evanson avenue | Lake Michigan | 265 00 |
| 22152 | 4 | Potwin place | North Leavitt | North Hamilton avenue | 176 00 |
| 22153 | 4 | Fremont | Grace | Bradley place | 176 00 |
| 22154 | 7 | Lunt avenue | Morton | Ridge road | 185 50 |
| 22155 | 9 | Southport avenue | North Shore avenue | Albion avenue | 238 50 |
| 22156 | 5 | Herndon avenue | Wellington | Lincoln avenue | 132 50 |
| 22157 | 4 | Fifty-sixth | Indiana avenue | Prairie avenue | 176 00 |
| 22158 | 15 | Montrose avenue | North Western avenue | Lincoln avenue | 397 50 |
| 22159 | 6 | East side of North Robey | Grace | Lincoln avenue | 159 00 |
| 22160 | 2 | Seventy-second | Langley avenue | Cottage Grove avenue | 58 00 |
| 22163 | 5 | Millard avenue | West Harrison | Colorado avenue | 132 50 |
| 22184 | 3 | North side of West Kinzie | North Claremont avenue | North Oakley avenue | 84 50 |
| 22185 | 12 | South Forty-first avenue | Washington | Lake | 318 00 |
| 22186 | 8 | North side of Irving Park blvd. . | North Robey | North Leavitt | 212 00 |
| 22187 | 5 | St. Louis avenue | Adams | Colorado avenue | 132 50 |
| 22188 | 14 | South Carpenter | Sixty-seventh | Sixty-ninth | 371 00 |
| 22192 | 3 | North Ashland avenue | Chase avenue | Sherwin avenue | 95 00 |
| 22196 | 7 | Thomas | North Leavitt | North Hoyne avenue | 185 50 |
| 22212 | 14 | Wellington | North Ashland avenue | Southport avenue | 371 00 |
| 22213 | 12 | South Halsted | West Sixty-ninth | West Seventy-first | 318 00 |
| 22214 | 25 | Evans avenue | West Seventy-fifth | P., Ft. W. & C. Ry | 662 50 |
| 22215 | 27 | Langley avenue | Seventy first | Seventy-fifth | 715 50 |
| 22216 | 9 connections, 21 L. P. & 2 } | Frankfort | North Maplewood avenue | North Western avenue | 135 00 |
| 22217 | connections 16 } | West Indiana | Monticello avenue | North Fortieth avenue | 586 50 |
| 22225 | 16 | North Robey | Addison | Roscoe | 424 00 |
| 22226 | 5 | South Lawndale avenue | Colorado avenue | Harrison | 132 50 |
| 22227 | 3 | St. Louis avenue | Madison | Monroe | 84 50 |
| 22288 | 8 | West Sixty-fifth | Stewart avenue | Wentworth avenue | 84 50 |
| | | Total ..... | ..... | ..... | \$ 53,536 82 |

BOULEVARD LAMP POSTS.

| No. of War'nt | No. of Posts | NAME OF STREET | FROM | TO | AMOUNT |
|------------------|-----------------|----------------------|----------------------|----------------|-------------|
| 21470 | 7 | St. Lawrence avenue. | Forty-ninth | Fiftieth. | 230 30 |
| 21590 | 15 | Vincennes avenue. | Forty eighth | Fiftieth. | 504 12 |
| 21639 | 8 | Graceland avenue. | Halsted. | Lake Michigan | 314 00 |
| 21646 | 13 | Belmont avenue | East Ravenswood Park | Ashland avenue | 445 25 |
| 21662 | 30 | Indiana avenue. | Fifty-first | Fifty-fifth | 1,170 00 |
| 21687 | 27 | Sheffield avenue | Bryn Mawr avenue. | Foster avenue | 931 50 |
| 21688 | 3 | Shields avenue | West Fifty-ninth | 370 feet north | 99 50 |
| 22002 | 14 | Vernon avenue | Seventy-first | Seventy-third | 497 00 |
| | | Total | | | \$ 4,191 67 |

SUMMARY.

STREETS.

Wooden Block Pavement:

| | | | | |
|----------------------|----|---------|----|---------------|
| North Division | \$ | 48,557 | 60 | |
| South Division | | 328,828 | 24 | |
| West Division | | 542,725 | 29 | |
| | | | | \$ 920,111 13 |

Macadam Pavement:

| | | | | |
|----------------------|----|---------|----|------------|
| North Division | \$ | 67,810 | 03 | |
| South Division | | 269,648 | 69 | |
| West Division | | 200,258 | 56 | |
| | | | | 537,717 28 |

Vitrified Brick Pavement:

| | | | | |
|----------------------|----|---------|----|------------|
| North Division | \$ | 13,974 | 55 | |
| South Division | | 223,191 | 96 | |
| West Division | | 81,933 | 06 | |
| | | | | 319,099 57 |

Asphalt Pavement:

| | | | | |
|----------------------|----|---------|----|------------|
| North Division | \$ | 62,941 | 20 | |
| South Division | | 212,387 | 11 | |
| West Division | | 301,917 | 77 | |
| | | | | 577,246 08 |

Granite Block Pavement:

| | | | | |
|----------------------|----|--------|----|-----------|
| North Division | \$ | 29,395 | 72 | |
| South Division | | 16,017 | 81 | |
| West Division | | 45,115 | 39 | |
| | | | | 90,528 92 |

ALLEYS.

Wooden Block Pavement:

| | | | | |
|----------------------|----|--------|----|-----------|
| North Division | \$ | 1,140 | 15 | |
| South Division | | 16,198 | 42 | |
| West Division | | 16,855 | 29 | |
| | | | | 34,193 86 |

Vitrified Brick Pavement:

| | | | | |
|----------------------|----|-------|----|----------|
| South Division | \$ | 1,406 | 16 | |
| West Division | | 4,772 | 68 | |
| | | | | 6,178 84 |

Asphalt Pavement:

| | | | | |
|----------------------|----|-------|----|----------|
| South Division | \$ | 1,408 | 75 | |
| | | | | 1,408 75 |

Granite Block Pavement:

| | | | | |
|----------------------|----|-----|----|--------|
| South Division | \$ | 961 | 90 | |
| | | | | 961 90 |

MISCELLANEOUS.

Opening and Widening:

| | | | | |
|---------------------|----|--------|----|---------------|
| South Division..... | \$ | 94,986 | 40 | |
| West Division | | 37,833 | 20 | |
| | | | | \$ 132,819 60 |

Water Supply Pipes:

| | | | | |
|---------------------|----|---------|----|------------|
| North Division..... | \$ | 12,363 | 30 | |
| South Division..... | | 71,748 | 90 | |
| West Division | | 141,857 | 22 | |
| | | | | 225,969 42 |

Water Service Pipes:

| | | | | |
|----------------------|----|--------|----|-----------|
| North Division | \$ | 10,489 | 50 | |
| South Division | | 46,993 | 50 | |
| West Division | | 29,024 | 50 | |
| | | | | 86,507 50 |

Sewers:

| | | | | |
|---------------------|----|---------|----|------------|
| North Division..... | \$ | 13,377 | 62 | |
| South Division..... | | 690,999 | 23 | |
| West Division | | 129,703 | 92 | |
| | | | | 834,080 77 |

Drains:

| | | | | |
|----------------------|----|--------|----|-----------|
| North Division | \$ | 12,012 | 50 | |
| South Division | | 40,184 | 53 | |
| West Division | | 31,957 | 50 | |
| | | | | 84,154 53 |

Cement Sidewalks:

| | | | | |
|----------------------|----|--------|----|-----------|
| North Division | \$ | 3,285 | 90 | |
| South Division..... | | 18,645 | 67 | |
| West Division | | 12,876 | 91 | |
| | | | | 34,808 48 |

Plank Sidewalks:

| | | | | |
|----------------------|----|--------|----|-----------|
| North Division | \$ | 2,744 | 51 | |
| South Division | | 56,270 | 63 | |
| West Division | | 34,789 | 70 | |
| | | | | 93,804 84 |

Gas Lamp Posts:

| | | | | |
|----------------------|----|--------|----|-----------|
| North Division | \$ | 6,450 | 76 | |
| South Division..... | | 25,154 | 06 | |
| West Division..... | | 21,932 | 00 | |
| | | | | 53,536 82 |

Boulevard Lamp Posts:

| | | | | |
|---------------------|----|-------|----|----------|
| North Division..... | \$ | 1,690 | 75 | |
| South Division..... | | 2,500 | 92 | |
| | | | | 4,191 67 |

| | | | | |
|-------------|----|-----------|----|--|
| TOTAL | \$ | 4,037,319 | 96 | |
|-------------|----|-----------|----|--|

RECAPITULATION.

Assessments
Prepared.

| | |
|---|-----------------|
| 66 Streets, wooden block pavement..... | \$ 920,111 13 |
| 29 Streets, macadam pavement..... | 537,717 28 |
| 10 Streets, vitrified brick pavement..... | 319,099 57 |
| 21 Streets, asphalt pavement..... | 577,246 08 |
| 9 Streets, granite block pavement..... | 90,528 92 |
| 22 Alleys, wooden block pavement..... | 34,193 86 |
| 2 Alleys, vitrified brick pavement..... | 6,178 84 |
| 1 Alley, asphalt pavement..... | 1,408 75 |
| 1 Alley, granite block pavement..... | 961 90 |
| 10 Opening and widening..... | 132,819 60 |
| 103 Water supply pipes..... | 225,969 42 |
| 85 Water service pipes..... | 86,507 50 |
| 101 Sewers..... | 834,080 77 |
| 101 Drains..... | 84,154 53 |
| 30 Sidewalks, cement..... | 34,808 48 |
| 248 Sidewalks, plank..... | 93,804 84 |
| 134 Lamp posts, gas..... | 53,536 82 |
| 8 Lamp posts, boulevard..... | 4,191 67 |
| Total .. | \$ 4,037,319 96 |

LIST OF ASSESSMENTS FOR EACH YEAR SINCE 1861.

| | |
|---|--------------|
| For the year ending April 1, 1862..... | \$ 42,635 49 |
| For the year ending April 1, 1863..... | 46,493 67 |
| For the year ending April 1, 1864..... | 389,169 31 |
| For the year ending April 1, 1865..... | 103,576 35 |
| For the year ending April 1, 1866..... | 802,574 56 |
| For the year ending April 1, 1867..... | 317,206 18 |
| For the year ending April 1, 1868..... | 1,354,436 48 |
| For the year ending April 1, 1869..... | 2,395,683 03 |
| For the year ending April 1, 1870..... | 2,836,852 48 |
| For the year ending April 1, 1871..... | 2,359,835 89 |
| For the year ending April 1, 1872..... | 62,222 25 |
| For the year ending April 1, 1873..... | ..... |
| For the year ending April 1, 1874..... | 749,460 27 |
| For the year ending April 1, 1875..... | 723,254 42 |
| For the nine months ending December 31, 1875..... | 60,585 72 |
| For the year ending December 31, 1876..... | 1,516,081 07 |
| For the year ending December 31, 1877..... | 124,498 48 |
| For the year ending December 31, 1878..... | 284,900 45 |
| For the year ending December 31, 1879..... | 588,963 44 |
| For the year ending December 31, 1880..... | 980,895 50 |

| | |
|--|-----------------|
| For the year ending December 31, 1881..... | \$ 1,227,169 71 |
| For the year ending December 31, 1882..... | 1,395,872 98 |
| For the year ending December 31, 1883..... | 2,232,757 04 |
| For the year ending December 31, 1884..... | 2,857,905 28 |
| For the year ending December 31, 1885..... | 2,889,544 80 |
| For the year ending December 31, 1886..... | 3,307,567 99 |
| For the year ending December 31, 1887..... | 3,160,474 67 |
| For the year ending December 31, 1888..... | 3,655,956 78 |
| For the year ending December 31, 1889..... | 4,220,869 93 |
| For the year ending December 31, 1890..... | 6,987,155 48 |
| For the year ending December 31, 1891..... | 8,790,443 29 |
| For the year ending December 31, 1892..... | 14,505,701 79 |
| For the year ending December 31, 1893..... | 6,001,445 65 |
| For the year ending December 31, 1894..... | 2,903,814 16 |
| For the year ending December 31, 1895..... | 4,387,214 44 |
| For the year ending December 31, 1896..... | 4,037,319 96 |
| <hr/> | |
| Total for thirty-six years..... | \$88,300,038.99 |

REPORT OF THE
Bureau of Maps and Plats
FOR 1896

BUREAU OF MAPS AND PLATS.

HON. JOSEPH DOWNEY,

COMMISSIONER OF PUBLIC WORKS:

DEAR SIR:—Herewith I have the honor to submit the annual report of the Bureau of Maps and Plats, for the year 1896.

In examining the work done, I beg to draw your attention to the fact that our working force for 1896 was reduced by order of the Council. Notwithstanding this there was apparently more accomplished than in 1895, but it was impossible, with the reduced force, to renew all defaced official record plats, which should have been done.

The work performed by this Bureau during the year 1896 was as follows:

Plats were prepared for—

| | |
|---|-------|
| Electric lamp post assessments | 8 |
| Electric lamp post ordinances | 12 |
| Lamp post ordinances..... | 597 |
| Lamp post orders | 340 |
| Lamp post assessments | 159 |
| Street improvement and street and alley opening assessments | 597 |
| Street and alley opening ordinances | 244 |
| Street Engineer's estimates | 518 |
| Surveys | 71 |
| Sidewalk assessments..... | 544 |
| Water pipe assessments | 276 |
| Law Department .. | 1,525 |
| Miscellaneous purposes | 250 |
| Total..... | 5,141 |

The number of distance sheets figured in this Bureau for the Bureau of Street and Alley cleaning was 1,322.

One hundred and ninety-four (194) new subdivisions of real estate within the City limits were recorded, and two hundred and eighty-two

(282) entries were made of the same upon the several sets of atlases in charge of this Bureau.

Thirty-two (32) vacations were placed on record and fifty-nine (59) entries were made of the same on the atlases.

Thirty-five (35) street openings were placed on record and forty-nine (49) entries were made of the same on the atlases.

Six (6) alley openings were recorded and eight (8) entries of the same were made on the atlases.

Plats for ninety-five (95) street openings were made ready for record.

Plats of the entire City of Chicago in three volumes, for the use of the City Gas Inspector's Bureau, were commenced in 1895, and the third volume was made and completed in 1896. Work was begun on the restoration of the plats of Hyde Park, but only twenty (20) pages could be completed, owing to lack of help as stated.

One draughtsman of this Bureau served during the spring session of the City Tax Commission for said Commission nearly two and one-half months, and another draughtsman of this Bureau served with the Special City Drainage Commission from November 12, 1896, to January 1, 1897.

About eight thousand (8,000) house number notices were served on owners, agents, etc., and the corresponding house number certificates were issued upon demand, free of charge, by this Bureau.

On the 12th day of March, 1896, this Bureau commenced to charge for legal descriptions, etc., and the cash receipts, which were almost exclusively for said legal descriptions, amounted to fifteen hundred and twenty-eight $\frac{5}{100}$ dollars (\$1,528 $\frac{5}{100}$) up to January 1, 1897, which amount was turned over from time to time, as received, to the Treasury Bureau of the Department of Public Works.

Over three hundred and ninety-five thousand feet (viz.: 395,017- $\frac{920}{1000}$ feet), equal to seventy-four $\frac{814}{1000}$ miles (74 $\frac{814}{1000}$ miles) of frontage were checked off by this Bureau to verify petitions for City Railway Companies, asking for right of way, etc.

There was no increase of territory in 1896.

The present area of Chicago consists of and grew as follows :

| | Square Miles. |
|--|---------------|
| After the sixth annexation, <i>April 29, 1889</i> , Chicago covered | 43.812 |
| The <i>seventh extension</i> was added <i>July 15, 1889</i> , and consists of the following : | |
| Part of Cicero, viz.: the east half of Sections 4 and 9 of Township 39 north, Range 13, E. 3d P. M. | 1.000 |
| City of Lake View | 10.408 |
| Town of Jefferson, except Sections 25, 35 and 36 | 29.530 |
| Town of Lake | 36.000 |
| Village of Hyde Park..... | 49.132 |
| The eighth extension, the village of Gano, was added April 1, 1890 | 1.773 |
| The ninth extension, South Englewood, was added May 12, 1890..... | 2.899 |
| The tenth extension, the village of Washington Heights, was added November 4, 1890 | 2.810 |
| And the village of West Roseland, was added November 4, 1890 | 1.793 |
| The eleventh extension, the village of Fernwood, was added April 7, 1891 | 0.981 |
| The twelfth extension, the village of West Ridge, was added April 19, 1893..... | 2.125 |
| And the village of Rogers Park was added April 19, 1893..... | 1.750 |
| The thirteenth extension, the village of Norwood Park, was added November 7, 1893 | 2.125 |
| The fourteenth extension, part of Calumet, was added February 25, 1895..... | 1.000 |
| <hr/> | |
| Total area of the City of Chicago, December 31, 1896, | 187.138 |

☞ Herewith please find colored Map showing *all extensions* of Chicago up to January 1, 1897.

For a detailed report on the growth of Chicago, beginning with the Town of Chicago, February 11, 1835, see latter part of my report.

The extreme length of Chicago is 26 miles, and its extreme width $14\frac{1}{2}$ miles.

MILEAGE OF STREETS AND ALLEYS

added to our City during the year 1896, by subdivisions and condemnations:

| LOCATION. | STREETS. | | ALLEYS. | |
|---|----------|-------|---------|-------|
| | Miles. | Feet. | Miles. | Feet. |
| Calumet, including Washington Heights and Gano..... | ..... | 3,730 | ..... | 2,725 |
| Hyde Park..... | 6 | 4,090 | 4 | 60 |
| Jefferson..... | 18 | 4,800 | 2 | 4,540 |
| Lake..... | 2 | 4,440 | 1 | 2,670 |
| Lake View..... | 6 | 280 | 3 | 585 |
| North Town..... | ..... | ..... | ..... | ..... |
| Norwood Park..... | ..... | ..... | ..... | ..... |
| Rogers Park and West Ridge..... | ..... | 2,820 | ..... | 450 |
| South Town..... | ..... | 3,300 | ..... | 2,525 |
| West Town..... | 3 | 20 | 2 | 540 |
| Totals..... | 39 | 2,360 | 14 | 3,535 |

Accompanying the report will be found a

HALF-SECTIONAL MAP OF CHICAGO,

which was prepared by this Bureau, and shows the following :

| | |
|-------------------------|-----------------------------|
| All Public Schools, | All Fire Engine Houses, |
| “ Water Works, | “ Hook and Ladder Stations, |
| “ “ Cribs, | “ Public Buildings, |
| “ “ Tunnels, | “ “ Bath Houses, |
| “ “ Mains, | “ “ Parks, |
| “ Pumping Stations, | “ Boulevards, |
| “ Police Stations, | “ Steam Railroads, |
| with Nos. of Precincts, | |

as also proposed park extensions with “Drives” and “Waterways” at the Lake Front, all of which will, no doubt, be of general interest to the citizens of Chicago, and show them how magnificent our already beautiful Garden City will look when the proposed *Lake Front Improvements* are complete.

THE GROWTH OF CHICAGO.

(See colored map.)

THE "TOWN OF CHICAGO."

John H. Kinzie, Gurdon S. Hubbard, Ebenezer Goodrich, John K. Boyer and John S. C. Hogan were the first trustees. It was incorporated by Act of *February 11, 1835*, and comprised all that territory covered by sections 9 and 16, north and south fractional section 10 and fractional section 15, in town 39 north, range 14 east of 3d principal meridian, with the following provision: "Provided that the authority of the Board of Trustees of the said Town of Chicago shall not extend over the south fractional section 10 until the same shall cease to be occupied by the United States."

THE "CITY OF CHICAGO."

Incorporated by Act of March 4, 1837, comprised "the district of country in the County of Cook, etc., known as the east $\frac{1}{2}$ of the southeast $\frac{1}{4}$ of section 33, township 40 north, range 14 east, and fractional section 34, township 40 north, range 14 east; also the east $\frac{1}{4}$ of sections 6, 7, 18 and 19, all of fractional section 3, and of sections 4, 5, 8 and 9, and fractional section 10 (except the southwest fractional $\frac{1}{4}$ thereof, occupied as a military post, until the same should become private property), fractional section 15, sections 16, 17, 20, 21, and fractional section 22, township 39 north, range 14 east."

Total area, March 4, 1837, 10.635 square miles.

FIRST EXTENSION OF CITY LIMITS.

Act of February 16, 1847, provided "That the district of country in the County of Cook, etc., known and described as follows, to-wit: All that part of township 39 north, range 14 east of the 3d principal meridian, which lies north of the north line of sections 27, 28, 29 and 30 of said township, and the east $\frac{1}{2}$ of section 33, township 40 north, range 14 east, and fractional section 34, township 40 north, range 14 east, shall hereafter be included in, constitute and be known by the name of City of Chicago."

| | | |
|--|--------|---------------|
| Area of first extension | 3.375 | square miles. |
| Carried | 10.635 | " " |
| Total area of City, February 16, 1847..... | 14.01 | " " |

SECOND EXTENSION OF CITY LIMITS.

Act of February 12, 1853, provides "that the corporate limits and jurisdiction of the City of Chicago shall be, and the same are hereby extended so as to embrace and include within the same the several tracts of land hereinafter described, which shall be deemed parts of the divisions of the said City named in connection therewith, as follows :

"*North Division.*—All those parts of sections 31 and 32, township 40 north, range 14 east, lying east of the center of the North branch of the Chicago river, and the west $\frac{1}{2}$ of section 33, in same township and range.

"*South Division.*—All of fractional section 27, township 39 north, range 14 east, and so much of the shore and bed of the lake as lies within one mile east of said section, and all of that part of section 28, same township and range, lying south and east of the south branch of the Chicago river.

"*West Division.*—All those parts of sections 28, 29 and 30, township 39 north, range 14 east, lying north of the South branch of the Chicago river."

| | | | |
|--|---------------------|---|---|
| Area of second extension | 3.988 square miles. | | |
| Carried | 14.01 | " | " |
| Total area of City, February 12, 1853..... | 17.998 | " | " |

THIRD EXTENSION OF CITY LIMITS.

Act of February 13, 1863, provides "The corporate limits and jurisdiction of the City of Chicago shall embrace and include within the same all of township 39 north, range 14 east of 3d principal meridian, and all of sections 31, 32 and 33, and fractional section 34, township 40 north, range 14 east, together with so much of the waters and bed of Lake Michigan as lies within one mile of the shore thereof, and east of the territory aforesaid."

| | | | |
|--|---------------------|---|---|
| Area of third extension..... | 6.284 square miles. | | |
| Carried | 17.998 | " | " |
| Total area of City, February 13, 1863..... | 24.282 | " | " |

FOURTH EXTENSION OF CITY LIMITS.

Act of February 27, 1869, provides "That the territorial limits of the City of Chicago shall be, and are hereby extended as follows : That part of section 30, township 40 north, range 14 east, which lies

west of the North branch of the Chicago river ; sections 1, 2, 11, 12, 13, 14, 23, 24, 25, 26, and that part of sections 35 and 36 lying northwest of the center of the Illinois and Michigan canal, all in township 39 north, range 13 east, shall be, and are hereby added to the City."

| | | |
|------------------------------------|--------|---------------|
| Area of fourth extension | 11.38 | square miles. |
| Carried | 24.282 | " " |

| | | |
|---|--------|-----|
| Total area of City, February 27, 1869 . . . | 35.662 | " " |
|---|--------|-----|

FIFTH EXTENSION OF CITY LIMITS.

Act of May 16, 1887, provides "That Section 36, township 40 north, range 13 east, town of Jefferson, shall be and is hereby added to the City."

| | | |
|-----------------------------------|--------|--------------|
| Area of fifth extension | 1.000 | square mile. |
| Carried | 35.662 | " miles. |

| | | |
|--|--------|-----|
| Total area of City, May 16, 1887 | 36.662 | " " |
|--|--------|-----|

SIXTH EXTENSION OF CITY LIMITS.

Act of April 29, 1889, provides "That that part of sections 35 and 36 lying southeasterly of the center of Illinois and Michigan canal, in township 39 north, range 13 east of 3d principal meridian, in Cook County, Illinois ; also that part of sections 3, 10, 15, and the east $\frac{3}{4}$ of sections 22, 27 and 34, lying northwest of the center of the Illinois and Michigan canal, in township 39 north, range 13 east of the 3d principal meridian, etc. ; and also section 25, township 40 north, of range 13 east of 3d principal meridian, etc., be and the same are hereby declared to be annexed to the incorporated City of Chicago."

| | | |
|-----------------------------------|--------|---------------|
| Area of sixth extension | 7.15 | square miles. |
| Carried | 36.662 | " " |

| | | |
|--|--------|-----|
| Total area of City, April 29, 1889 | 43.812 | " " |
|--|--------|-----|

SEVENTH EXTENSION OF CITY LIMITS.

July 15, 1889, an order was filed in the County Court of Cook County, declaring the result of a special election, held June 29, 1889,

by which the following territory, all situated in the County of Cook, Illinois, was annexed to the City of Chicago, viz. :

| | | | |
|--|--------------------|---|--------|
| 1.—Part of Town of Cicero, viz: The east ½ of sections 4 and 9, township 39 north, range 13 east of 3d principal meridian | 1.000 square mile. | | |
| 2.—The City of Lake View..... | 10.408 | “ | miles. |
| 3.—The Town of Jefferson (except sections 25 and 36, formerly annexed)..... | 29.530 | “ | “ |
| 4.—The Town of Lake..... | 36.000 | “ | “ |
| 5.—The Village of Hyde Park | 49.132 | “ | “ |
| <hr/> | | | |
| Total area of seventh extension..... | 126.070 | “ | “ |
| Carried | 43.812 | “ | “ |
| <hr/> | | | |
| Total extension of City, July 15, 1889.. | 169.882 | “ | “ |

EIGHTH EXTENSION OF CITY LIMITS.

By election held April 1, 1890.

The Village of Gano.—The south ½ of section 21, all of section 28 north of the Indian boundary line, that part of section 28 south of the Indian boundary line, lying west of the east line of said village of Gano, and north of the Little Calumet river; also that part of section 33 north of the Indian boundary line, lying north of the Little Calumet river, and that part of the east ½ of the northwest ¼ of section 33 south of the Indian boundary line, lying north of the Little Calumet river, all in town 37 north, range 14 east of the principal meridian.

| | | | |
|--|--------------------|---|---|
| Area of eighth extension..... | 1.773 square miles | | |
| Carried | 169.882 | “ | “ |
| <hr/> | | | |
| Total area of City, April 1, 1890..... | 171.655 | “ | “ |

NINTH EXTENSION OF CITY LIMITS.

By ordinance passed May 12, 1890, sections 5 and 6, also the northeast ¼ of section 4, except the west fifty feet of the south 666 feet thereof; also the northwest ¼ of section 4, except the west south 666 feet thereof; also the southeast ¼ of section 4, except the west fifty feet thereof; also the northeast ¼ section 9, except the

west fifty feet thereof; all in town 37 north, range 14 east of the 3d principal meridian.

| | | | |
|---------------------------------------|--------------------|---|---|
| Area of ninth extension | 2.899 square miles | | |
| Carried | 171.655 | " | " |
| Total area of City, May 12, 1890..... | 174.554 | " | " |

TENTH EXTENSION OF CITY LIMITS.

By election held November 4, 1890.

1. *Village of Washington Heights.*—Section 7, the west $\frac{3}{4}$ and northeast $\frac{1}{4}$ of northeast quarter of section 8, and the north $\frac{1}{2}$ of section 17 and 18, all in town 37 north, range 14 east of 3d principal meridian. 2.81 square miles.

2. *Village of West Roseland.*—Southeast $\frac{1}{4}$ section 9 (except the west fifty feet thereof), the east $\frac{1}{4}$ of northeast $\frac{1}{4}$ of section 20, the north $\frac{1}{2}$ of section 21, and all of section 16, all in town 37 north, range 14 east of 3d principal meridian. 1.793 square miles.

| | | | |
|--|---------------------|---|---|
| Total area of tenth extension..... | 4.603 square miles. | | |
| Carried | 174.554 | " | " |
| Total area of City, November 4, 1890.. | 179.157 | " | " |

ELEVENTH EXTENSION OF CITY LIMITS.

By election held April 7, 1891.

The Village of Fernwood, viz.: The west half and the west fifty feet of east $\frac{1}{2}$ of section 9, the east $\frac{1}{2}$ of the southeast $\frac{1}{4}$ and the southeast quarter of the northeast $\frac{1}{4}$ of section 8, the southwest $\frac{1}{4}$ and the south 666 feet of the northwest $\frac{1}{4}$ and the west fifty feet of the southeast $\frac{1}{4}$, and the west fifty feet of the south 666 feet of the northeast $\frac{1}{4}$ of section 4, all in town 37 north, range 14 east of the 3d principal meridian.

| | | | |
|--|---------------------|---|---|
| Area of eleventh extension | 0.981 square miles. | | |
| Carried | 179.157 | " | " |
| Total area of City, April 7, 1891..... | 180.138 | " | " |

TWELFTH EXTENSION OF CITY LIMITS.

By election held April 4, 1893.

The Village of Rogers Park.—Commencing at the intersection of Indian boundary line and shore of Lake Michigan in section 29, township 41, north range 14; thence southwesterly on Indian boundary

line to the intersection with center line running east and west of said section 29; thence west on said center line to a point on east and west center line of section 30, 200 feet west of center of public road known as "Ridge road;" then southeasterly on a line parallel with center of said road to the center line running east and west of section 31; then east to center of said Ridge road, then southeasterly on center of said road to south line of township 41; thence east on said south line to the shore of Lake Michigan; thence northwesterly along shore to place of beginning—being 2.125 square miles.

The Village of West Ridge.—Commencing at intersection of the center line of Ridge road with south line of section 31, township 41 north, range 14, then north along center of said road to east and west center line of section 31; then west on said center line 200 feet, thence northwesterly on a line parallel with the center of Ridge road and 200 feet distant therefrom to east and west center line of section 30; thence west on said center line of section 30 to west line of southeast $\frac{1}{4}$ of section 25, township 41 north, range 13; thence south on west line of said southeast $\frac{1}{4}$ of section 25 to south line of said section; thence west on said south line to southwest corner of said section; thence south on west line of section 36, township 41 north, range 13, to south line of said township; thence east on south line of said township to place of beginning. Also the southwest $\frac{1}{4}$ of said section 25, township 41 north, range 13, having been annexed to the village of West Ridge. Filed for record April 10, 1893, in Book 4,247, page 191—being 1.75 square miles.

| | | | |
|--|---------------------|---|---|
| Area of twelfth extension | 3.875 square miles. | | |
| Carried | 180.138 | " | " |
| <hr/> | | | |
| Total area of City April 4, 1893 | 184.013 | " | " |

THIRTEENTH EXTENSION OF CITY LIMITS.

By election held November 7, 1893.

Village of Norwood Park.—All of section 6, township 40 north, range 13; the west $\frac{1}{2}$ of section 5, township 40 north, range 13; the south $\frac{1}{2}$ of the south $\frac{1}{2}$ of fractional section 31, township 41 north, range 13; the east $\frac{1}{2}$ of the east $\frac{1}{2}$ of section 1, township 40 north, range 12; the southeast $\frac{1}{4}$ of the southeast $\frac{1}{4}$ of section 36, township 41 north, range 12.

FIRST ANNEXATION TO VILLAGE OF NORWOOD PARK.

Filed for record February 13, 1891. Document No. 1,418,596, in Book 48, page 11.

Blocks 10, 11 and 12, in subdivision of lot 2 (except Anna Mary Wingert's subdivision) of the Government division of the northeast $\frac{1}{4}$ of fractional section 1, township 40 north, range 12 east (said block 12 being known as "Schleiter's Addition to Norwood Park" in the town of Norwood Park).

SECOND ANNEXATION TO THE VILLAGE OF NORWOOD PARK.

Filed for record November 6, 1891. Document No. 1,564,587, in Book 52, page 11.

That portion of lots 9, 10 and 11, in Fred Ebinger's subdivision of 67.90 acres, in the southwest $\frac{1}{4}$ of section 31, township 41 north, range 13, etc., lying immediately north of and adjoining said village.

| | |
|--|---------------------|
| Total area of thirteenth extension | 2.125 square miles. |
|--|---------------------|

| | | | |
|---------------|---------|---|---|
| Carried | 184.013 | " | " |
|---------------|---------|---|---|

| | | | |
|--|---------|---|---|
| Total area of City November 7, 1893 .. | 186.138 | " | " |
|--|---------|---|---|

FOURTEENTH EXTENSION OF CITY LIMITS.

By ordinance of the City Council, February 25, 1895.


This extension is situated in the town of Calumet and consists of the south $\frac{1}{2}$ of section 20 and the north $\frac{1}{2}$ of section 29, township 37 north, range 14 east of 3d principal meridian, and is bounded as follows :

On the east by Halsted street.

On the west by Ashland avenue.

On the north by 115th street.

On the south by 123d street.

 The above was filed for record March 13, 1895. Document No. 2,185,319, in Book 64, pages 26 to 29.

| | |
|--|--------------------|
| Total area of fourteenth extension | 1.000 square mile. |
|--|--------------------|

| | | | |
|---------------|---------|---|--------|
| Carried | 186.138 | " | miles. |
|---------------|---------|---|--------|

| | | | |
|---|---------|---|---|
| Total area of Chicago, February 25, 1895. | 187.138 | " | " |
|---|---------|---|---|

Or 119,768.32 acres.

THE PARK AND BOULEVARD SYSTEM OF THE
CITY OF CHICAGO.

PARKS AND BOULEVARDS UNDER THE CONTROL OF THE
RESPECTIVE PARK COMMISSIONERS.

NORTH SIDE.

PARKS.

| | | |
|--|--------------|-------|
| Lincoln Park..... | area, 320.00 | acres |
| Union Square, corner of Goethe and Astor streets..... | “ 0.46 | “ |
| Triangle between Clark, LaSalle and Eugene streets | “ 0.0225 | “ |
| Triangle between Clark, Wells and Ogden front | “ 0.0482 | “ |
| Total..... | “ 320.5307 | “ |

June 27, 1887, the City Council passed an ordinance turning above two triangles over to the Lincoln Park Commissioners, who accepted them June 30, 1887; and Union Square was turned over by ordinance November 30, 1891, and accepted by Park Commissioners December 16, 1891.

NORTH SIDE—CONTINUED.

| BOULEVARDS. | Length in Feet. | Date of Ordinance. | Date of Acceptance by Park Commissioners. |
|---|-----------------|--------------------|---|
| Lincoln park blvd. (formerly Pine st.), from Pearson st. to Oak st. | 1,180 | April 13, 1884. | May 17, 1884. |
| Lake Shore drive, from Oak st. to North ave. | 3,290 | ..... | ..... |
| Lake Shore drive (in Lincoln park), from North ave. to Diversey | 8,850 | ..... | ..... |
| Lake View ave. blvd., from Diversey to Belmont ave. | 2,621 | ..... | ..... |
| Sheridan road, from Belmont ave. to Rodgers ave. (City limits) | 32,180 | May 8, 1893. | July 26, 1893. |
| Dearborn ave., from Burton place to North ave. | 580 | July 8, 1895. | Oct. 15, 1895. |
| North ave., from Clark st. to Lake Shore drive. | 1,382 | Dec. 28, 1885. | Jan. 5, 1886. |
| North Park ave., from Clark st. to Fullerton ave. | 2,357 | July 15, 1886. | Aug. 18, 1886. |
| Fullerton ave., from North Park ave. to Clark st. | 1,091 | July 6, 1891. | July 14, 1891. |
| Fullerton ave., from North Clark st. to Orchard st. | 1,540 | Feb. 20, 1893. | Mar. 27, 1893. |
| Diversey ave., from Lake View blvd. to Clark st. | 1,680 | Sept. 21, 1891. | Oct. 21, 1891. |
| Diversey ave., from Clark st. to north branch of Chicago river. | 10,170 | Jan. 14, 1895. | Apr. 12, 1895. |
| Ridge ave., from Devon ave. to north City limits. | 8,140 | May 18, 1896. | June 9, 1896. |
| Outer drive, near lake shore in Lincoln park | 5,700 | ..... | ..... |
| Total length. | 80,761 | or 15.2956 miles. | |
| Lincoln park regatta course, about... | 6,000 | | |

WEST SIDE.

| ORIGINAL PARKS. | Acres. | Date of Ordinance. | Date of Acceptance by Park Commissioners. |
|-------------------------------|--------|--------------------------------|---|
| Humboldt park | 200.62 | ..... | Nov. 4, 1869. |
| Garfield park..... | 185.87 | ..... | Nov. 4, 1869. |
| Douglas park | 179.79 | ..... | Nov. 4, 1869. |
| PARKS ACCEPTED FROM THE CITY. | | | |
| Union park..... | 14.80 | Oct. 9, 1885. | Oct. 12, 1885. |
| Jefferson park..... | 5.42 | Oct. 9, 1885. | Oct. 12, 1885. |
| Vernon park..... | 4.51 | Oct. 12, 1885. | Nov. 9, 1885. |
| Wicker park | 4.89 | Oct. 26, 1885. | Nov. 9, 1885. |
| Campbell park..... | .55 | Oct. 25, { Nov. 25, } 1889. | Dec. 24, 1889. |
| Logan square..... | 6.06 | ..... | ..... |
| Palmer square | 15.79 | ..... | ..... |
| Sacramento square | 3.65 | ..... | ..... |
| Total | 621.95 | | |

WEST SIDE—CONTINUED.

| ORIGINAL BOULEVARDS. | Length in Miles. | Date of Ordinance. | Date of Acceptance by Park Commissioners. |
|--|------------------------|-----------------------|--|
| Humboldt blvd., from Western ave. to Humboldt park | 2.50 | ..... | Nov. 4, 1869. |
| Central blvd., from Central Park ave. to Humboldt park | 1.56 | ..... | Nov. 4, 1869. |
| Douglas blvd., from Douglas park to Garfield Park | 1.67 | ..... | Nov. 4, 1869. |
| BOULEVARDS ACCEPTED FROM THE CITY. | | | |
| Southwest blvd., from Douglas park to Illinois & Michigan canal | 2.00 | ..... | May 2, 1881. |
| Washington blvd., from Halsted st. to Garfield park | 3.25 | July 7, 1879. | Oct. 17, 1879. |
| Twelfth st. blvd., from Ashland ave. to Ogden ave. | 0.89 | Jan. 17, 1887. | Jan. 24, 1887. |
| Ashland blvd., from Washington blvd. to Twelfth st. | 1.25 | July 26, 1886. } | Jan. 31, 1887. |
| Ashland blvd., from Washington blvd. to Lake st | | Jan. 3, 1887. } | |
| Ogden ave. blvd., from Twelfth st. to Albany avenue | 1.15 | Jan. 31, 1887. | Mar. 7, 1887. |
| Jackson blvd., from Halsted st. to Garfield park | 3.50 | Jan. 17, 1887. | Jan. 24, 1887. |
| Warren ave. blvd., from Garfield park to W. Fortieth st. | 0.25 | Oct. 22, 1888. | Mar. 17, 1891. |
| W. Washington st. blvd., from W. Fortieth st. to W. Fifty-second st. | 0.25 | Oct. 12, 1891. | Mar. 8, 1892. |
| W. Fortieth st. blvd., from Warren ave. to W. Washington st. | 1.50 | Oct. 12, 1891. | Mar. 8, 1892. |
| Polk st. blvd., abutting Vernon Park. | 0.02 | Oct. 12, 1891. | Mar. 8, 1892. |
| Central Park ave. blvd., from Madison st. to Colorado ave. | 0.11 | Feb. 26, 1894. | April 10, 1894. |
| Diversey st. blvd., from Oakley ave. to river | 0.36 | June 10, 1895. | July 9, 1895. |
| Jackson blvd., from Halsted st. to river | 0.13 | Oct. 7, 1895. | Oct. 22, 1895. |
| Humboldt blvd., from Western ave. to Diversey st. | 0.47 | March 2, 1896. | Mar. 10, 1896. |
| | 0.32 | By condemnation. | Nov. 26, 1895. |
| Total length of blvds. | 20.93 | | |

SOUTH SIDE.

| PARKS. | Area in Acres. | Date of Ordinance. | Date of Acceptance by Park Commissioners. |
|---|----------------|--------------------|---|
| Washington park | 371.00 | ..... | ..... |
| Jackson park | 586.00 | ..... | ..... |
| Gage park | 20.00 | ..... | ..... |
| Midway Plaisance | 80.00 | ..... | ..... |
| Lake Front park { Old Lake Front park, 41.30 } { New Lake Front park, 169.60 } | 210.90 | July 27, 1896. | Nov. 27, '96. |
| Total..... | 1,267.90 | | |

☞ All above parks, except Lake Front park, were acquired and taken under the original Park Acts.

| BOULEVARDS. | Miles. | Date of Ordinance. | Date of Acceptance by Park Commissioners. |
|--|--------|-------------------------------------|---|
| Michigan ave. blvd., from Randolph st. to Sixty-third st..... | 7.000 | { June 27, '79 Oct. 17, '84 } | July 15, '79. Dec. 31, '84. |
| Grand blvd., from Thirty-fifth st. to Fifty-first st..... | 4.130 | ..... | ..... |
| Drexel blvd., from Oakwood blvd. to Fifty-first st..... | 3.050 | ..... | ..... |
| Oakwood blvd., from Drexel blvd. to Grand blvd..... | 0.500 | ..... | ..... |
| Southwest blvd., from Canal st. to Fifty-fifth st..... | 3.000 | ..... | ..... |
| Garfield blvd., from Western ave. to South Park ave..... | 7.140 | ..... | ..... |
| Midway Plaisance blvd., from Cottage Grove ave. to Stony Island ave... | 2.000 | ..... | ..... |
| Fifty-first st. blvd., from Drexel blvd. to Washington ave..... | 0.750 | ..... | ..... |
| Thirty-fifth st. blvd., from Michigan ave. to South Park ave..... | 0.375 | ..... | ..... |
| Jackson st. blvd., from Michigan ave. to river | 0.750 | { May 16, '96 } { Oct. 19, '96 } | Nov. 16, '96. |
| Washington ave. blvd., from Forty-ninth st. to Fifty-ninth st..... | 1.250 | ..... | ..... |
| Total..... | 29.945 | | |

☞ All boulevards having no dates of acceptance by Park Commissioners were acquired and taken under the original Park Acts.

RECAPITULATION.

UNDER CONTROL OF PARK COMMISSIONERS.

PARKS.

| | Area in Acres. |
|------------------|--------------------------------|
| North Side | 320.53 |
| West Side..... | 621.95 |
| South Side..... | 1,267.90 |
| Total | 2,210.38 or 3.377 square miles |

BOULEVARDS.

| | Miles. |
|-----------------|---------|
| North Side..... | 15.2956 |
| West Side..... | 20.9300 |
| South Side..... | 29.9450 |
| Total | 66.1706 |

PARKS AND PUBLIC SQUARES,

UNDER CONTROL OF THE CITY.

NORTH SIDE.

| | Area in Acres. |
|---|----------------|
| Gross park, Otto street, between Paulina and Wood streets..... | 0.53 |
| Washington square, Dearborn avenue, Clark street, Walton and Wash- ington places | 2.30 |
| Green Bay park, State street, Rush street and Bellevue place..... | 0.19 |
| Oak park, Cass, Rush and Chestnut streets | 0.20 |
| Total | 3.22 |

WEST SIDE.

| | Area in Acres. |
|---|----------------|
| Bickerdike square, south side of Ohio street, between Armour and Bickerdike streets | 0.94 |
| Irving Park, southeast corner of Irving Park boulevard and Irving ave. | 0.25 |
| Holstein Park, Oakley avenue, between Ems and Hamburg streets | 2.38 |
| Congress park, west of Rockwell street, between Van Buren and Harri- son streets..... | 0.68 |
| Shedd's park, south of C., B. & Q. R. R., between Lawndale and Millard avenues and south of Twenty-third street..... | 1.08 |
| Total..... | 5.33 |

SOUTH SIDE.

| | Area in Acres. |
|---|----------------|
| Aldine square, west side of Vincennes avenue, between Thirty-seventh and Thirty-eighth streets..... | 1.49 |
| Ellis park, Vincennes and Cottage Grove avenues, between Thirty-sixth and Thirty-seventh streets..... | 3.37 |
| Adams park, Kidder court, Dobson avenue and Seventy-sixth street.... | 0.82 |
| Douglas Monument park, I. C. R. R., Thirty-fifth street and Groveland park | 2.02 |
| East End park, Fifty-first street, Fifty-third street and East End avenue | 5.20 |
| Lakewood park, Lake avenue, Greenwood avenue and Forty-third street | 0.27 |
| Total..... | <u>13.17</u> |

RECAPITULATION.

PARKS AND SQUARES UNDER CONTROL OF THE CITY.

| | Area in Acres. |
|------------------|----------------|
| North side | 3.22 |
| West side..... | 5.33 |
| South side | 13.17 |
| Total | <u>21.72</u> |

LENGTH OF THE LONGEST STREETS OF THE CITY.

| | Miles. |
|--|-----------|
| WESTERN AVENUE.—Running north and south from Howard street (northern City limits) to 107th street (southern City limits)..... | 22 |
| HALSTED STREET.—Running north and south from Lake Michigan (northern terminus) to Little Calumet river (southern City limits).... | 21½ |
| STATE STREET.—Running north and south from North avenue (foot of Lincoln park) to Blue Island road or 127th street..... | 17 |
| MILWAUKEE AVENUE.—Running diagonally from southeast to northwest, from the intersection of West Lake and Canal streets to Nutwood avenue (northern City limits)..... | 11½ |
| EIGHTY-SEVENTH STREET.—Running east and west from Lake Michigan to West Forty-eighth street (western City limits).... | 10½ |
| NORTH AVENUE.—Running east and west from Lake Michigan to West Seventy-second street (western City limits)..... | 9½ |
| Total combined length of our six longest streets..... | <u>91</u> |

Respectfully submitted,

O. L. WULLWEBER,

Superintendent of the Bureau of Maps and Plats.

Book-keeper's Statement.

BOOK-KEEPER'S STATEMENT.

HON. JOSEPH DOWNEY,
Commissioner of Public Works.

DEAR SIR:—I herewith respectfully submit statement in detail of the Receipts and Expenditures of your Department for the year 1896:

WATER FUND.

| | |
|--|--------------|
| Balance to credit, Jan. 1st, 1896 | \$133,299 83 |
|--|--------------|

RECEIPTS.

| | |
|---|----------------|
| Amount collected during the year for current water rents assessed | \$2,108,512 28 |
|---|----------------|

| | |
|---|--------------|
| Amount collected during the year for current water rents, meter measure- ments | 1,020,381 27 |
|---|--------------|

Acc't Water Permits.

| | |
|--|-----------|
| Amount received for taps and permits, also plumbers' licenses and special assess- ment work | 27,151 58 |
|--|-----------|

Acc't Meters and Private Work.

| | |
|---|-----------|
| Amount received for labor and material used in laying and repairing water supply pipes for elevators and gen- eral supply of water, also for changing location of hydrants and stop cocks and repairing meters | 91,229 71 |
|---|-----------|

| | | |
|-----------------------|----------------|---------------|
| Carried forward | \$3,247,274 84 | \$ 133,299 83 |
|-----------------------|----------------|---------------|

| | | |
|--|----------------|---------------|
| Brought forward..... | \$3,247,274 84 | \$ 133,299 83 |
| <i>Acc't North Pump. Works.</i> | | |
| Amount received for scrap iron, empty barrels, etc... | 43 80 | |
| <i>Acc't South Pump. Works.</i> | | |
| Amount received for scrap iron, etc..... | 13 50 | |
| <i>Acc't Central Pump. Works.</i> | | |
| Amount received for empty barrels, etc | 37 45 | |
| <i>Acc't West Pump. Works.</i> | | |
| Amount received for scrap iron, empty barrels, etc... | 25 80 | |
| <i>Acc't Sixth-eighth St. Pump. Works.</i> | | |
| Amount received for empty barrels, etc..... | 411 12 | |
| <i>Acc't Wash. Heights Pump. Works.</i> | | |
| Amount received for scrap iron | 6 55 | |
| <i>Acc't Lake View Pump. Works.</i> | | |
| Amount received for scrap iron, etc..... | 15 75 | |
| <i>Acc't Hydrant Wrenches.</i> | | |
| Amount received as de- posit for loan of hydrant wrenches..... | 1,410 00 | |
| Carried forward..... | \$3,249,238 81 | \$ 133,299 83 |

| | | |
|---|----------------|-----------------------|
| Brought forward | \$3,249,238 81 | \$ 133,299 83 |
| <i>Acc't Water Works Shop.</i> | | |
| Amount received for brass borings, lead dross, scrap iron, etc..... | 1,330 60 | |
| <i>Acc't Water Pipe Extension.</i> | | |
| Amount received for lowering and repairing water pipe..... | 3,057 67 | |
| Rent of Rookery Lot | 35,000 04 | |
| From private parties to lay water mains | 78,983 93 | |
| From sale of Water Certificates | 166,962 50 | |
| | | <u>3,534,573 55</u> |
| Grand total..... | | <u>\$3,667,873 38</u> |

EXPENDITURES.

Acc't Water Pipe Extension and Water Pipe and Special Castings.

| | |
|--|---------------|
| Labor..... | \$ 211,762 89 |
| Water pipe and special castings | 106,120 98 |
| Cost of labor and material furnished by Water Works Shops..... | 65,824 90 |
| Teaming | 25,427 64 |
| Hydrant rings, covers, stop-cocks, chambers, etc..... | 8,294 39 |
| Comp. hydrant basins.... | 4,226 86 |
| Blasting and excavating.... | 3,021 47 |
| Coal | 713 38 |
| Cement | 3,469 07 |
| Horse-shoeing | 434 10 |
| Plumbing..... | 2,154 29 |
| Lumber | 3,009 36 |
| Transfers to Special Assessments..... | 42,163 69 |
| Carried forward | \$ 476,623 02 |

| | | |
|---|---------------|---------------|
| Brought forward..... | \$ 476,623 02 | |
| Hardware | 1,931 95 | |
| Brick | 6,687 64 | |
| Interest on water certificates | 13,468 67 | |
| Lead | 8,503 03 | |
| Oil and grease | 301 53 | |
| Cash items | 232 24 | |
| Stationery | 280 94 | |
| Sand and Gravel | 712 16 | |
| Advertising | 102 18 | |
| Car tickets | 891 72 | |
| Smith's pat. sleeves..... | 1,392 50 | |
| Nails | 2,595 00 | |
| Cedar blocks | 219 00 | |
| Rent..... | 210 00 | |
| Repaving | 2,742 16 | |
| Telephone service..... | 31 25 | |
| Payment of Note Metro- politan National Bank ... | 4,635 00 | |
| Sundries—Stationery, print- ing, ice, etc..... | 954 99 | |
| | <hr/> | \$ 522,514 98 |

Water Works Repairs.

| | | |
|--|---------------|------------|
| Labor..... | \$ 204,585 08 | |
| Cost of labor and material furnished by Water Works | | |
| Shops..... | 20,216 46 | |
| Teaming | 5,472 82 | |
| Lumber | 3,288 77 | |
| Hydrant chambers, castings, etc | 2,614 79 | |
| Pipe | 348 66 | |
| Water supply furnished by Rogers Park Pumps | 7,044 34 | |
| | <hr/> | 243,570 92 |

Acc't Water Office Expense.

| | | |
|-------------------------|-----------|---------------|
| Advertising..... | \$ 60 40 | |
| Cash Items | 51 35 | |
| Telephone Service | 309 96 | |
| | <hr/> | |
| Carried forward | \$ 421 71 | \$ 766,085 90 |

| | | | |
|--|----|----------|---------------|
| Brought forward | \$ | 421 71 | \$ 766,085 90 |
| Stamps | | 7,400 00 | |
| Hardware | | 112 66 | |
| Lumber | | 46 08 | |
| Stationery, car fare, etc | | 5,458 79 | |
| Rent, Water Office South Halsted street | | 208 33 | |
| | | <hr/> | 13,647 57 |

Acc't Water Fund Proportion of Office Salaries and Expense.

| | | | |
|--|----|-----------|-----------|
| Labor | \$ | 29,628 62 | |
| Stationery, postage, annual report, etc | | 5,050 06 | |
| Hardware | | 247 19 | |
| Cash items | | 4,683 08 | |
| Telephone service | | 326 25 | |
| Car tickets | | 1,479 85 | |
| Advertising | | 190 30 | |
| Express charges | | 180 08 | |
| Sundries | | 375 67 | |
| | | <hr/> | 42,161 10 |

Acc't Two-Mile Crib.

| | | | |
|---------------------------------|----|----------|-----------|
| Labor | \$ | 6,068 89 | |
| Construction | | 240 02 | |
| Tug service | | 4,689 25 | |
| Coal | | 390 00 | |
| Oil, grease and waste | | 41 75 | |
| Hardware | | 284 77 | |
| Sundries | | 95 37 | |
| | | <hr/> | 11,810 05 |

Acc't Four-Mile Crib.

| | | | |
|--------------------------|----|----------|----------|
| Labor | \$ | 3,831 29 | |
| Tug service | | 4,642 25 | |
| Hardware | | 188 15 | |
| Lumber | | 20 67 | |
| Oil and grease | | 22 64 | |
| Coal | | 226 00 | |
| Sundries | | 50 75 | |
| | | <hr/> | 8,981 75 |

| | | |
|-------------------------|----|------------|
| Carried forward | \$ | 842,686 37 |
|-------------------------|----|------------|

Brought forward.....

\$ 842,686 37

Acc't Lake View Crib.

| | |
|---------------------------|-------------|
| Labor..... | \$ 2,740 95 |
| Lumber | 109 26 |
| Hardware | 161 62 |
| Oil and grease | 20 95 |
| Tug service..... | 4,530 19 |
| Cable | 1,345 00 |
| Board of Inspectors | 75 88 |
| Coal..... | 130 00 |
| Sundries | 5 48 |

 9,119 33
Acc't Hyde Park Crib.

| | |
|-------------------------|--------------|
| Construction..... | \$ 37,800 00 |
| Tug service..... | 631 25 |
| Hardware | 8 49 |
| Oil and grease..... | 10 34 |
| Refund on plans..... | 160 00 |
| Cable | 1,310 00 |
| Specifications..... | 25 00 |
| Advertising..... | 3 60 |
| Labor and material..... | 2,106 32 |
| Coal..... | 84 50 |
| Sundries | 9 73 |

 42,149 23
Acc't North Pump. Works.

| | |
|------------------------------|--------------|
| Labor | \$ 49,103 26 |
| Cost of work done by Water | |
| Work Shops | 2,255 93 |
| Coal | 85,243 40 |
| Repairing boilers and engine | 2,188 77 |
| Oil and grease..... | 851 57 |
| Waste and packing | 285 31 |
| Telephone service | 156 25 |
| Lumber | 67 50 |
| Brick, cement, etc..... | 68 55 |
| Gaskets and valves | 124 16 |
| Paving | 491 49 |

 Carried forward \$ 140,836 19 \$ 893,954 93

Brought forward \$ 140,836 19 \$ 893,954 93

| | | |
|---|----------|------------|
| Boiler compound..... | 196 80 | |
| Hardware | 362 01 | |
| Gas..... | 1,149 40 | |
| Cash items | 4 50 | |
| Metal polish, soap and soap powder..... | 45 88 | |
| Paint, oil and putty..... | 514 09 | |
| Sprinkling | 250 00 | |
| Plumbing..... | 159 93 | |
| Ice | 40 62 | |
| Sundries..... | 111 30 | |
| | | 143,660 72 |

Acc't South Pump. Works.

| | | |
|--|--------------|-----------|
| Labor | \$ 41,394 89 | |
| Cost of labor and material furnished by Water Works Shop | 309 78 | |
| Coal..... | 31,057 63 | |
| Repairing boiler, engine, etc. | 1,199 87 | |
| Valves | 1,258 05 | |
| Gaskets | 159 57 | |
| Oil and grease..... | 631 20 | |
| Hardware | 484 84 | |
| Steam fitting.. | 2,635 10 | |
| Brick, clay, cement and sand | 180 29 | |
| Stationery | 13 00 | |
| Gas..... | 808 60 | |
| Waste and packing | 636 32 | |
| Paint, oil, putty, etc | 74 15 | |
| Lumber | 94 49 | |
| Ice | 30 38 | |
| Repairing roof | 2,226 00 | |
| Redemption tax certificate . | 1,299 90 | |
| Sundries | 82 86 | |
| | | 84,576 97 |

Acc't West Pump. Works.

| | | |
|--------------------------------|--------------|----------------|
| Labor..... | \$ 33,946 64 | |
| Coal..... | 38,842 39 | |
| Repairing boiler, engine, etc. | 1,651 00 | |
| | | |
| Carried forward..... | \$ 74,440 03 | \$1,122,192 62 |

| | | | |
|----------------------------|----|-----------|----------------|
| Brought forward | \$ | 74,440 03 | \$1,122,192 62 |
| Oil and grease | | 769 58 | |
| Waste and packing | | 251 77 | |
| Valves | | 558 44 | |
| Hose, etc. | | 177 90 | |
| Lumber | | 325 06 | |
| Hardware | | 223 72 | |
| Ice | | 98 37 | |
| Gas | | 325 40 | |
| Sand, brick and clay | | 81 84 | |
| Electric supplies | | 143 65 | |
| Boiler compound | | 103 26 | |
| Sundries. | | 111 65 | |
| | | | 77,610 67 |

*Acc't Norwood Park Pump.
Works.*

| | | | |
|-------------------------|----|----------|----------|
| Labor | \$ | 1,617 75 | |
| Coal | | 512 35 | |
| Oil and grease | | 25 73 | |
| Hardware | | 21 01 | |
| Boiler compound | | 18 55 | |
| Waste and packing | | 8 47 | |
| Cash items | | 21 75 | |
| Repairing boiler | | 2 75 | |
| Sundries | | 15 81 | |
| | | | 2,244 17 |

Acc't Central Pump. Works.

| | | | |
|--------------------------------|----|-----------|-----------|
| Labor | \$ | 25,624 68 | |
| Repairing boiler, engine, etc. | | 1,074 41 | |
| Coal | | 19,133 98 | |
| Oil and grease | | 936 60 | |
| Waste | | 479 71 | |
| Metal polish | | 17 50 | |
| Gas | | 284 40 | |
| Hardware | | 429 29 | |
| Fire clay and brick | | 239 00 | |
| Soap and soap powder | | 55 22 | |
| Lumber | | 300 61 | |
| Sundries | | 231 76 | |
| | | | 48,807 16 |

Carried forward

\$1,250,854 62

Brought forward. \$1,250,854 62

*Acc't Sixty-eighth Street
Pump. Works.*

| | | |
|---|--------------|-----------|
| Labor | \$ 34,264 66 | |
| Cost of labor and material furnished by Water Works Shop | 1,033 06 | |
| Coal | 16 00 | |
| Fuel oil | 33,772 03 | |
| Hardware | 716 57 | |
| Ice | 88 75 | |
| Oil and grease | 1,048 17 | |
| Waste and packing | 685 86 | |
| Cash items | 10 90 | |
| Repairing dynamo | 129 63 | |
| Air pumps | 450 00 | |
| Valves | 477 60 | |
| Condenser cone | 300 00 | |
| Engine fittings | 147 66 | |
| Sand, cement and brick | 116 75 | |
| Lumber | 53 62 | |
| Cancellation certificate No. 14,869 for receiving well at Seventieth street | 642 71 | |
| Special assessment paving boulv'd and Yates avenue. | 1,103 42 | |
| Sundries | 250 68 | |
| | | 75,308 07 |

*Acc't Washington Heights
Pump. Works.*

| | | |
|---------------------------|-------------|----------------|
| Labor | \$ 3,206 85 | |
| Coal | 1,756 81 | |
| Oil and grease | 64 19 | |
| Waste and packing | 45 01 | |
| Repairing tank | 70 00 | |
| Cash items | 11 50 | |
| Fire clay and brick | 5 33 | |
| Smoke stack | 90 00 | |
| Carried forward | \$ 5,249 69 | \$1,326,162 69 |

| | | | |
|-------------------------|----|----------|----------------|
| Brought forward | \$ | 5,249 69 | \$1,326,162 69 |
| Hardware | | 41 94 | |
| Sundries | | 12 06 | |
| Tank | | 492 45 | |
| | | <hr/> | 5,796 14 |

Acc't Lake View Pump Works.

| | | | |
|--|----|-----------|-----------|
| Labor | \$ | 25,485 63 | |
| Cost of labor and material furnished by Water Works Shop | | 269 04 | |
| Coal | | 21,480 95 | |
| Oil and grease | | 898 80 | |
| Hardware | | 440 99 | |
| Gas | | 400 10 | |
| Telephone service | | 125 00 | |
| Waste and packing | | 268 17 | |
| Fire clay and brick | | 39 75 | |
| Boiler compound | | 72 80 | |
| Steam fitting | | 438 10 | |
| New pump and repairing old one | | 1,716 73 | |
| Dunham Towing Co., laying pipe | | 2,488 66 | |
| Removing 620 feet inlet pipe | | 775 00 | |
| Diver | | 250 00 | |
| Cash item | | 5 28 | |
| Electric supplies | | 22 90 | |
| Repairing engine, boilers, etc. | | 1,453 28 | |
| Valves, etc | | 296 34 | |
| Sundries | | 308 59 | |
| | | <hr/> | 57,236 11 |

Acc't Southwest Pump Works.

| | | | |
|---------------------------|----|-----------|-----------|
| Purchase site | \$ | 11,500 00 | |
| Examining title | | 27 00 | |
| Advertising | | 6 40 | |
| | | <hr/> | 11,533 40 |

Acc't Northwest Pump Works.

| | | | |
|-------------------------|--|--|----------------|
| Advertising | | | 76 30 |
| Carried forward | | | <hr/> |
| | | | \$1,400,804 64 |

Brought forward

\$1,400,804 64

Acc't Water Meter and Private Works.

| | |
|---|--------------|
| Labor | \$ 50,181 26 |
| Cost of labor and material furnished by Water Works | |
| Shop | 1,374 04 |
| Meters | 16,399 65 |
| Rebates on deposits for set- ting meters, etc. | 3,945 59 |
| Meter covers | 773 56 |
| Flanges, nipples, valves, etc. | 1,540 62 |
| Taps | 1,406 93 |
| Rebates on deposit for use of water | 1,230 23 |
| Lumber | 453 83 |
| Hardware | 81 63 |
| Plumbing | 91 14 |
| Sundries | 156 70 |

77,635 18
Acc't Water Works Shop.

| | |
|---------------------------------|--------------|
| Labor | \$ 49,295 59 |
| Brass castings | 25,265 62 |
| Iron and iron castings | 4,673 62 |
| Repairing boiler | 238 99 |
| Hardware | 1,896 51 |
| Valves | 6,599 39 |
| Coal | 2,086 67 |
| Gas | 217 40 |
| Lead | 1,185 13 |
| Waste and packing | 197 66 |
| Oil and grease | 75 14 |
| Steel | 836 51 |
| Lumber | 30 22 |
| Paint, oil, putty, etc. | 60 08 |
| Cash items | 7 93 |
| Stationery | 28 86 |
| Brick, sand and cement | 38 03 |
| Sundries | 102 48 |

\$ 92,835 83

Carried forward

\$ 92,835 83

\$1,478,439 82

Brought forward \$ 92,835 83 \$1,478,439 82

Amount transferred to water
pipe extension, pumping
station, etc. 92,835 83

Acc't Northwest Land Tunnel.

| | | |
|--|------------|------------|
| Labor | 37,651 43 | |
| Contractors | 369,138 43 | |
| Cost of labor and material furnished by Water Works | | |
| Shop | 245 66 | |
| Hardware | 398 16 | |
| Lumber | 74 77 | |
| Stationery | 86 04 | |
| Rent | 1,185 00 | |
| Inspecting and repairing in- struments | 307 35 | |
| Gas | 15 90 | |
| Damages account blasting in tunnel | 1,623 00 | |
| Testing machine | 250 00 | |
| Site for Northwest Pumping Station | 100 00 | |
| Taxes on pumping site | 185 52 | |
| Telephone service | 89 30 | |
| Purchase land | 13,400 00 | |
| Sundries | 137 98 | |
| | <hr/> | 424,888 54 |

Acc't Lake View Tunnel.

| | | |
|--------------------------------|-------------|-----------|
| Labor | \$ 2,993 95 | |
| Contractors | 82,322 96 | |
| Board for Inspectors | 152 12 | |
| Diving | 335 75 | |
| Filling shaft | 405 00 | |
| Sundries | 7 17 | |
| | <hr/> | 86,216 95 |

Acc't Western Ave. Tunnel.

| | | |
|-----------------------|-------------|----------|
| Labor | \$ 1,816 27 | |
| Iron piling | 56 57 | |
| | <hr/> | 1,872 84 |

Carried forward \$1,991,418 15

| | |
|----------------------|----------------|
| Brought forward..... | \$1,991,418 15 |
|----------------------|----------------|

Acc't Water Permits.

| | | |
|--------------------------------|--------------|-----------|
| Labor..... | \$ 48,096 04 | |
| Mueller drills and fixtures .. | 521 43 | |
| Tap machine and fixtures... | 2,890 10 | |
| Hardware | 99 89 | |
| Ferrules..... | 5,372 24 | |
| Stationery | 191 39 | |
| Sundries | 33 24 | |
| | <hr/> | 57,204 33 |

*Acc't Sixty-eighth Street
Tunnel Extension.*

| | | |
|---------------------------|-------------|-----------|
| Labor..... | \$ 3,763 26 | |
| Contractors | 33,870 89 | |
| Constructing bridge | 293 00 | |
| Hardware | 23 80 | |
| Cable | 35 00 | |
| Building breakwater | 21,669 17 | |
| Sundries | 120 03 | |
| | <hr/> | 59,775 15 |

Acc't Northeast Lake Tunnel.

| | | |
|------------------------------|-------------|------------|
| Labor..... | \$ 9,129 26 | |
| Contractor | 229,607 40 | |
| Refund on deposits for plans | 190 00 | |
| Advertising | 26 91 | |
| Cash item | 16 80 | |
| Sundries | 18 40 | |
| | <hr/> | 238,988 77 |

Acc't Water Office Salaries.

| | |
|---|------------|
| Collecting water rents as- sessed, inspectors, assess- ors and draughtsmen..... | 206,242 15 |
|---|------------|

Acc't New Repair Shop.

| | | |
|----------------------|--------------|----------------|
| Labor | \$ 560 00 | |
| Contractors..... | 19,520 00 | |
| Site..... | 23,760 00 | |
| | <hr/> | |
| Carried forward | \$ 43,840 00 | \$2,553,628 55 |

| | | |
|---------------------|--------------|----------------|
| Brought forward.... | \$ 43,840 00 | \$2,553,628 55 |
| Building dock..... | 1,800 00 | |
| Setting glass..... | 726 00 | |
| Teaming | 379 16 | |
| Sundries | 430 09 | |
| | <hr/> | 47,175 25 |

Other Expenses.

| | | |
|--|---------------|-----------------------|
| Water loan interest..... | \$ 261,305 23 | |
| Water loan certificates.... | 363,462 50 | |
| Hyde Park bonds..... | 9,000 00 | |
| Town of Lake bonds..... | 15,000 00 | |
| Refunding advances to lay water pipe..... | 83,573 82 | |
| Refund for hydrant wrenches, | 1,235 00 | |
| Miscellaneous items | 1,604 07 | |
| Refunding duplicate pay- ments of water tax, etc. . | 6,506 00 | |
| | <hr/> | 741,686 62 |
| Total expenses..... | | \$3,342,490 42 |
| Balance to credit of water fund, January 1, 1897 | | 325,382 96 |
| | | <hr/> |
| | | <u>\$3,667,873 38</u> |

SEWER FUND

RECEIPTS.

| | | |
|--|---------------|---------------------------|
| Amount received from house drain permits | \$ 29,476 19 | |
| Amount received from drain layers' licenses | 2,318 00 | |
| Amount appropriated by City Council for repairing and cleaning sewers and catch-basins | \$ 125,000 00 | |
| Amount appropriated for sewer office salaries | 25,040 00 | |
| Amount appropriated for extension of Seventy-third street pile outlet | 1,645 00 | |
| Amount appropriated for extension of Belmont avenue pile outlet | 1,500 00 | |
| Amount appropriated for Sixty-ninth street sewer pump | 8,631 00 | |
| Amount appropriated for Seventieth street sewer pump | 8,015 00 | |
| Amount appropriated for Seventy-third street sewer pump | 8,015 00 | |
| Amount appropriated for Ninety-fourth street sewer pump | 4,080 00 | |
| Amount appropriated for Woodlawn sewer pump... | 8,415 00 | |
| Amount received from private parties for labor and material | 11,054 09 | |
| Received from special assessment for work and inspection | 110,139 71 | |
| | <hr/> | 311,534 80 |
| Total receipts | | <hr/> <hr/> \$ 343,328 99 |

EXPENSES.

| | |
|---|-------------|
| Sewers North Division | \$ 1,457 67 |
| Sewers South Division | 4,048 15 |
| Sewers West Division | 4,578 95 |
| House drains | 28,197 61 |
| Cleaning sewers and catch-basins | 96,901 65 |
| Repairing sewers and catch-basins | 46,247 32 |
| Intersections | 44,111 57 |
| Sewer office expense | 934 59 |
| Sewer office salaries | 24,568 82 |
| Seventy-third street pile outlet | 1,595 00 |
| Belmont avenue pile outlet .. | 1,385 00 |
| Salaries of inspectors (special assessment work) | 41,340 72 |
| Miscellaneous items | 4,692 36 |

OTHER EXPENSES.

| | |
|---------------------------------------|-----------|
| Sixty-ninth street sewer pump | 10,317 69 |
| Seventieth street sewer pump | 7,817 99 |
| Seventy-third street sewer pump | 7,043 08 |
| Ninety-fourth street sewer pump | 3,235 79 |
| Woodlawn sewer pump | 10,496 97 |
| Kensington sewer pump | 2 25 |

\$ 338,973 18

Transferred to General Fund

4,355 81

Total

\$ 343,328 99

APPROPRIATION FUND.

RECEIPTS.

Acc't Improved Streets.

| | | |
|-----------------------------|---------------|---------------|
| Amount appropriated by City | | |
| Council | \$ 175,000 00 | |
| Other receipts | 22,160 98 | |
| | <hr/> | \$ 197,160 98 |

Acc't Unimproved Streets.

| | | |
|-----------------------------|---------------|------------|
| Amount appropriated by City | | |
| Council..... | \$ 125,000 00 | |
| Other receipts | 823 44 | |
| | <hr/> | 125,823 44 |

Acc't Scavenger Service.

| | | |
|-----------------------------|---------------|------------|
| Amount appropriated by City | | |
| Council | \$ 345,000 00 | |
| Other receipts | 4,837 15 | |
| | <hr/> | 349,837 15 |

*Acc't Cleaning Improved and
Macadam Streets.*

| | | |
|-----------------------------|---------------|------------|
| Amount appropriated by City | | |
| Council..... | \$ 225,000 00 | |
| Other receipts | 11,538 46 | |
| | <hr/> | 236,538 46 |

Acc't Ward Inspectors.

| | | |
|-----------------------------|--|-----------|
| Amount appropriated by City | | |
| Council..... | | 34,000 00 |

Acc't Removal Dead Animals.

| | | |
|-----------------------------|--|-----------|
| Amount appropriated by City | | |
| Council..... | | 37,500 00 |

*Acc't Street and Alley Clean-
ing, Office Salaries.*

| | | |
|-----------------------------|--|----------|
| Amount appropriated by City | | |
| Council | | 9,500 00 |

| | |
|----------------------|---------------|
| Carried forward..... | \$ 990,360 03 |
|----------------------|---------------|

| | |
|----------------------|---------------|
| Brought forward | \$ 990,360 03 |
|----------------------|---------------|

Acc't Public Buildings.

| | | |
|--|--------------|-----------|
| Amount appropriated by City Council..... | \$ 40,000 00 | |
| Receipts from Public Library, etc..... | 4,034 83 | |
| | <hr/> | 44,034 83 |

Acc't Janitors' Salaries.

| | | |
|--|--------------|-----------|
| Amount appropriated by City Council..... | \$ 43,748 20 | |
| Other receipts | 1,121 25 | |
| | <hr/> | 44,869 45 |

Acc't Bridge Telephone Operators' Salary.

| | |
|---|----------|
| Amount appropriated by City Council | 8,880 00 |
|---|----------|

Acc't Public Parks.

| | | |
|--|--------------|-----------|
| Amount appropriated by City Council..... | \$ 11,500 00 | |
| Balance from 1895..... | 1,264 78 | |
| | <hr/> | 12,764 78 |

Acc't House Moving Permits.

| | |
|------------------------------------|----------|
| Amount received from permits. | 1,682 00 |
|------------------------------------|----------|

Acc't Street Permits.

| | |
|--|-----------|
| Amount received for work on permits..... | 51,559 74 |
|--|-----------|

Acc't Special Assessments.

| | |
|--|------------|
| Amount received from special assessment fund for cost of making and collecting special assessments, salaries and office expenses | 244,941 40 |
| | <hr/> |

| | |
|----------------------|----------------|
| Carried forward | \$1,399,092 23 |
|----------------------|----------------|

| | | |
|--|-------------|----------------------|
| Brought forward | | \$1,399,092 23 |
| <i>Acc't Street Lamp Repairs.</i> | | |
| Amount appropriated by City Council | | 40,000 00 |
| Amount received from special assessments, gas company, judgments, etc..... | | 12,663 72 |
| <i>Acc't Street Department Office Expense.</i> | | |
| Amount appropriated by City Council | \$ 1,000 00 | |
| Other receipts | 2 50 | |
| | <hr/> | 1,002 50 |
| <i>Acc't City Engineer's Office Expense.</i> | | |
| Amount appropriated by City Council | | 500 00 |
| <i>Acc't Map Office Expense.</i> | | |
| Amount appropriated by City Council | \$ 1,000 00 | |
| Other receipts | 1,583 05 | |
| | <hr/> | 2,583 05 |
| <i>Acc't Proportional Office Salaries.</i> | | |
| Amount appropriated by City Council | | 14,245 00 |
| <i>Acc't Street Department Office Salaries.</i> | | |
| Amount appropriated by City Council | | 15,630 00 |
| <i>Acc't City Engineer's Office Salaries.</i> | | |
| Amount appropriated by City Council | | 12,475 00 |
| Carried forward | | <hr/> \$1,498,191 50 |

| | |
|-------------------------|----------------|
| Brought forward | \$1,498,191 50 |
|-------------------------|----------------|

Acc't Proportional Office Expense.

| | |
|---|----------|
| Amount appropriated by City Council | 1,750 00 |
|---|----------|

Acc't Chicago Harbor.

| | |
|---|----------|
| Amount appropriated by City Council | 5,670 00 |
|---|----------|

Acc't Street Opening and Obstruction Inspectors' Salaries.

| | |
|---|----------|
| Amount appropriated by City Council | 7,200 00 |
|---|----------|

Acc't Bridge Repairs.

| | | |
|---|---------------|------------|
| Amount appropriated by City Council | \$ 100,000 00 | |
| Other receipts | 13,201 53 | |
| | <hr/> | 113,201 53 |

Acc't Vessel Despatcher's Salary.

| | |
|---|----------|
| Amount appropriated by City Council | 2,250 00 |
|---|----------|

Acc't Steam Roller Engineer's Salary.

| | | |
|---|-------------|----------|
| Amount appropriated by City Council | \$ 1,800 00 | |
| Amount received for use of steam roller | 1,195 14 | |
| | <hr/> | 2,995 14 |

Acc't Bridge Tenders' Salaries.

| | |
|---|-----------|
| Amount appropriated by City Council | 88,415 00 |
|---|-----------|

| | | |
|-------------------------|-------|----------------|
| Carried forward | <hr/> | \$1,719,673 17 |
|-------------------------|-------|----------------|

| | | |
|---|--------------|----------------------|
| Brought forward | | \$1,719,673 17 |
| <i>Acc't Fullerton Avenue Conduit.</i> | | |
| Amount appropriated by City Council | \$ 15,475 00 | |
| Other receipts | 11 80 | |
| | <hr/> | 15,486 80 |
| <i>Acc't Canal Pump. Station.</i> | | |
| Amount appropriated by City Council | \$ 53,655 00 | |
| Other receipts | 42 20 | |
| | <hr/> | 53,697 20 |
| <i>Acc't Fullerton Ave. Bridge.</i> | | |
| Amount appropriated by City Council | \$ 2,500 00 | |
| Balance from 1895 | 1,503 33 | |
| | <hr/> | 4,003 33 |
| <i>Acc't Special Deposits.</i> | | |
| Amount received for inspection | | 4,517 70 |
| <i>Acc't North Halsted Street Bridge.</i> | | |
| Amount appropriated by City Council | \$ 75,000 00 | |
| Other receipts | 13,556 25 | |
| | <hr/> | 88,556 25 |
| <i>Acc't Stock Yards Viaduct.</i> | | |
| Receipts | | 82,912 72 |
| <i>Acc't Bridgeport Lock.</i> | | |
| Amount appropriated by City Council | | 4,000 00 |
| <i>Acc't Public Library.</i> | | |
| Receipts from extras | | 1,036 25 |
| Carried forward | | <hr/> \$1,973,883 42 |

| | |
|-------------------------|----------------|
| Brought forward | \$1,973,883 42 |
|-------------------------|----------------|

Acc't Street Privileges.

| | |
|---|----------|
| Receipts from Street Privileges | 6,266 25 |
|---|----------|

Acc't Diversey Ave. Bridge.

| | | |
|---|--------------|-----------|
| Amount appropriated by City Council | \$ 17,000 00 | |
| Balance from 1895 | 13,566 01 | |
| | <hr/> | 30,566 01 |

Acc't Map Dept. Salary.

| | |
|---|-----------|
| Amount appropriated by City Council | 14,940 00 |
|---|-----------|

Snow Acc't.

| | |
|----------------------------------|-----------|
| Receipts from dumps, etc | 10,613 19 |
|----------------------------------|-----------|

Acc't Public Benefits.

| | |
|---|----------|
| Amount appropriated by City Council | 1,000 00 |
|---|----------|

Acc't Improvement East Side of La Salle Street.

| | |
|---|----------|
| Amount appropriated by City Council | 1,083 73 |
|---|----------|

Acc't Building Dock.

| | | |
|---|-------------|----------|
| Amount appropriated by City Council | \$ 2,000 00 | |
| Other receipts | 1,543 23 | |
| | <hr/> | 3,543 23 |

Acc't Dredging Permits.

| | | |
|---|-------------|----------|
| Amount appropriated by City Council | \$ 5,000 00 | |
| Other receipts | 1,881 25 | |
| | <hr/> | 6,881 25 |

| | |
|-------------------------|----------------------|
| Carried forward | <hr/> \$2,048,777 08 |
|-------------------------|----------------------|

| | | | |
|--|----|----------------|-----------------|
| Brought forward | | \$2,048,777 08 | |
| <i>Acc't Chittenden Bridge.</i> | | | |
| Amount appropriated by City | | | |
| Council | \$ | 1,500 00 | |
| Other receipts | | 5 00 | |
| | | <hr/> | 1,505 00 |
| <i>Acc't Unpaid Pay Rolls.</i> | | | |
| Balance from 1895 | \$ | 15,947 80 | |
| Other receipts | | 47 25 | |
| | | <hr/> | 15,995 05 |
| <i>Acc't Removal Rock from the West Fork of the South Branch of the Chicago River.</i> | | | |
| Amount appropriated by City | | | |
| Council | | | 15,000 00 |
| <i>Acc't Sidewalk Repairs.</i> | | | |
| Amount appropriated by City | | | |
| Council | \$ | 60,000 00 | |
| Other receipts | | 9,777 21 | |
| | | <hr/> | 69,777 21 |
| <i>Acc't Smallpox Hospital.</i> | | | |
| Balance appropriated 1895 | \$ | 57,735 81 | |
| Other receipts | | 161 36 | |
| | | <hr/> | 57,897 17 |
| From general fund, etc. | | | 31,642 75 |
| <i>New Bath House.</i> | | | |
| Balance appropriated 1895 | | 11,516 24 | |
| Total receipts | | <hr/> | \$ 2,252,110 50 |

EXPENSES.

Acc't Improved Streets.

| | | |
|------------------------------|----|------------|
| Labor | \$ | 144,376 11 |
| Labor and material | | 2,171 40 |
| Lumber | | 2,680 90 |
| Paving blocks | | 17,167 62 |
| | | <hr/> |
| Carried forward | \$ | 166,396 03 |

Brought forward \$ 166,396 03

| | | |
|---|-----------|---------------|
| Crushed stone | 11,928 75 | |
| Tar, sand, cement and gravel | 7,260 04 | |
| Car tickets | 1,939 00 | |
| Rent..... | 1,650 00 | |
| Cash items | 173 75 | |
| Hardware | 270 59 | |
| Electric light service during 1895..... | 3,781 22 | |
| Improvement to south ap- proach to Rush street bridge | 1,249 62 | |
| Repaving..... | 1,236 95 | |
| Coal..... | 87 85 | |
| Sundries | 332 59 | |
| | <hr/> | \$ 196,306 39 |

Acc't Unimproved Streets.

| | | |
|--|--------------|------------|
| Labor..... | \$ 98,761 08 | |
| Labor and material..... | 4,588 85 | |
| Lumber | 5,683 20 | |
| Crushed stone | 9,446 17 | |
| Hardware | 1,717 39 | |
| Coal | 229 50 | |
| Sand, gravel and tar..... | 654 79 | |
| Rent..... | 500 00 | |
| Electric light service during 1895..... | 1,478 11 | |
| Car tickets | 144 21 | |
| Paving blocks..... | 2,338 50 | |
| Sundries | 79 80 | |
| | <hr/> | 125,621 60 |

Acc't Sidewalk Repairs.

| | | |
|-------------------------|--------------|-----------|
| Labor..... | \$ 51,910 59 | |
| Labor and material..... | 2,573 36 | |
| Lumber | 13,744 23 | |
| Hardware | 1,540 05 | |
| Other expenses | 750 25 | |
| | <hr/> | 70,518 48 |

Carried forward. ... \$ 392,446 07

Brought forward

\$ 392,446 07

Acc't Bridge Repairs.

| | | |
|---|--------------|---------------|
| Labor | \$ 48,663 22 | |
| Labor and material | 5,506 39 | |
| Lumber | 20,087 70 | |
| Teaming | 449 40 | |
| Oil and grease | 836 73 | |
| Coal | 11,749 47 | |
| Electric power | 4,334 43 | |
| Iron material | 5,225 96 | |
| Hardware | 2,230 90 | |
| Repairing boilers | 1,599 29 | |
| Steel castings | 1,248 90 | |
| Paving blocks | 752 10 | |
| Gravel, cement, brick and clay | 235 55 | |
| Iron work on Milwaukee ave. viaduct | 972 00 | |
| Dredging, driving piles and repairing Ashland ave. bridge | 11,193 90 | |
| Labor and iron work on So. Halsted street viaduct . . . | 2,224 04 | |
| Driving piles, etc., at sundry bridges | 7,935 80 | |
| Paving | 1,180 59 | |
| Repairing Fifth ave. viaduct . | 1,475 00 | |
| Paint, oil, etc | 1,066 72 | |
| Labor and material on Van Buren street viaduct | 875 83 | |
| Stone | 542 77 | |
| Stationery | 218 05 | |
| Waste, packing, etc | 92 24 | |
| Cash items | 134 07 | |
| Electric supplies | 179 45 | |
| Repairing motor | 666 25 | |
| Gas | 202 60 | |
| Plumbing | 141 91 | |
| Valves, gaskets, etc | 75 65 | |
| Sundries | 698 57 | |
| | | 132,795 48 |
| Carried forward | | \$ 525,241 95 |

Brought forward \$ 525,241 95

Acc't Street Lamp Repairs.

| | | |
|---------------------------------|--------------|-----------|
| Labor | \$ 30,423 94 | |
| Repairing street lamps | 12,388 86 | |
| Glass and lamp fittings | 9,616 72 | |
| Lamp posts | 202 50 | |
| Telephone service | 60 44 | |
| Other expenses | 20 44 | |
| | <hr/> | 52,712 90 |

Acc't Diversey Ave. Bridge.

| | | |
|------------------------|-----------|-----------|
| Labor | \$ 290 07 | |
| Construction | 30,706 43 | |
| Inspecting and Testing | | |
| Material | 140 87 | |
| Hardware | 91 11 | |
| Sundries | 18 25 | |
| | <hr/> | 31,246 73 |

Acc't Fullerton Ave. Bridge.

| | | |
|--------------------|-----------|--------|
| Labor | \$ 475 56 | |
| Painting | 265 00 | |
| Sundries | 66 | |
| | <hr/> | 741 22 |

*Acc't North Halsted Street
Bridge.*

| | | |
|----------------------------------|-------------|------------|
| Labor | \$ 5,337 21 | |
| Construction | 101,713 02 | |
| Building foot bridge | 475 00 | |
| Services of civil engineer . . . | 2,450 00 | |
| Advertising | 226 60 | |
| Royalty | 750 00 | |
| Specifications | 80 30 | |
| Refunded on plans | 25 00 | |
| Other expenses | 840 27 | |
| | <hr/> | 111,897 40 |

| | |
|-------------------------|---------------|
| Carried forward | \$ 721,840 20 |
|-------------------------|---------------|

Brought forward \$ 721,840 20

Acc't Stock Yards Viaduct.

| | | |
|--------------------------------|-----------|-----------|
| Construction | \$ 79,105 | |
| Account raising building . . . | 395 00 | |
| Labor | 3,980 58 | |
| Gas | 49 20 | |
| Specifications | 56 50 | |
| Advertising | 23 85 | |
| Land damages | 900 00 | |
| Other expenses | 63 34 | |
| | <hr/> | 84,573 72 |

Acc't Fullerton Avenue Conduit.

| | | |
|-----------------------------|-------------|-----------|
| Labor | \$ 7,351 61 | |
| Coal | 4,180 22 | |
| Gas | 305 00 | |
| Oil and grease | 268 64 | |
| Waste and packing | 56 93 | |
| Hardware | 93 52 | |
| Boiler compound | 73 76 | |
| Other expenses | 341 98 | |
| | <hr/> | 12,671 66 |

Acc't Canal Pump. Works.

| | | |
|---|--------------|-----------|
| Labor | \$ 26,991 92 | |
| Labor and material | 1,263 33 | |
| Repairing boiler and fittings for engine, etc. | 5,849 19 | |
| Coal | 34,214 39 | |
| Oil and grease | 1,395 01 | |
| Blacksmithing | 358 20 | |
| Lumber | 302 35 | |
| Steam fitting | 1,041 27 | |
| Cement, brick, clay, etc. . . . | 408 22 | |
| Boiler compound | 154 37 | |
| Other expenses | 276 80 | |
| | <hr/> | 72,255 05 |

Carried forward \$ 891,340 63

Brought forward \$ 891,340 63

Acc't Special Assessments.

| | | |
|--|---------------|------------|
| Salaries of clerks, engineers, rodmen, etc. | \$ 122,959 98 | |
| Services as Commissioners.. | 19,930 02 | |
| Clerk of County Court | 26,995 30 | |
| Real estate expert | 20,871 80 | |
| Legal services | 7,532 36 | |
| Advertising | 4,680 98 | |
| Collecting special assess- ments | 35,859 82 | |
| Stationery, car-fare, printing, etc | 4,293 01 | |
| Cancellation tax certificate . | 564 63 | |
| Cash items | 998 09 | |
| Telephone service | 248 07 | |
| | <hr/> | 244,934 06 |

Acc't Smallpox Hospital.

| | | |
|--------------------------------|-------------|-----------|
| Labor | \$ 4,608 08 | |
| Construction. | 62,507 87 | |
| Heating and ventilating . . . | 9,340 00 | |
| Sewerage work | 1,511 00 | |
| Plumbing | 5,180 95 | |
| Electric wiring, etc | 1,752 50 | |
| Furnace | 400 00 | |
| Laundry machine | 1,735 00 | |
| Insurance | 375 00 | |
| Blue prints, etc | 43 64 | |
| Advertising | 12 38 | |
| Dynamo engine | 2,120 61 | |
| Electric fixtures | 493 00 | |
| | <hr/> | 90,080 03 |

Acc't Chicago Harbor.

| | | |
|--------------------------|-------------|----------|
| Salaries | \$ 3,671 51 | |
| Dredging | 1,993 85 | |
| Other expenses | 29 64 | |
| | <hr/> | 5,695 00 |

Carried forward \$1,232,049 72

Brought forward \$1,232,049 72

Acc't Steam Roller.

| | | |
|----------------------|-------------|----------|
| Labor | \$ 2,352 72 | |
| Coal | 165 40 | |
| Fittings | 162 97 | |
| Oil and grease | 17 36 | |
| Hardware | 13 64 | |
| Cash item | 7 25 | |
| Sundries | 5 42 | |
| | <hr/> | 2,724 76 |

Acc't Street Cleaning.

| | | |
|-------------------------------|---------------|------------|
| Street cleaning by contract.. | \$ 161,586 11 | |
| Street cleaning by Bureau .. | 102,112 61 | |
| Stationery | 579 80 | |
| Hardware | 548 27 | |
| Snow plow | 750 00 | |
| Brooms | 669 63 | |
| Telephone service..... | 123 75 | |
| Cash items | 86 40 | |
| Car tickets..... | 181 27 | |
| Other expenses..... | 1,998 90 | |
| | <hr/> | 268,636 74 |

Acc't Garbage.

| | | |
|------------------------------|--------------|------------|
| Labor | \$ 29,128 09 | |
| Removal garbage, ashes, etc. | 283,443 99 | |
| | <hr/> | 312,572 08 |

Acc't Street Permits.

| | |
|---------------------|-----------|
| Street Permits..... | 30,428 48 |
|---------------------|-----------|

Acc't New Bath House.

| | | |
|--------------------------------|-------------|----------|
| Construction | \$ 5,425 00 | |
| Plumbing | 680 00 | |
| Heating..... | 400 00 | |
| Stationery, advertising, etc.. | 45 22 | |
| | <hr/> | 6,550 22 |

Acc't Dredging Permits.

| | | |
|----------------------|-------------|----------|
| Labor | \$ 6,706 75 | |
| Other expenses | 174 50 | |
| | <hr/> | 6,881 25 |

| | | |
|----------------------|-------|----------------|
| Carried forward..... | <hr/> | \$1,859,843 25 |
|----------------------|-------|----------------|

| | | |
|--|--------------|----------------------|
| Brought forward | | \$1,859,843 25 |
| <i>Acc't Removal Dead Animals.</i> | | |
| Removal Dead Animals | | 37,500 00 |
| <i>Acc't Street Privileges.</i> | | |
| Services, etc. | | 4,543 32 |
| <i>Acc't City Hall.</i> | | |
| Coal | \$ 24,188 02 | |
| Repairing boilers, engines, etc. | 1,020 56 | |
| Repairing elevators. | 675 38 | |
| Steam fitting | 1,806 38 | |
| Hardware | 842 55 | |
| Oil and grease | 665 45 | |
| Waste and packing | 425 99 | |
| Ice | 677 12 | |
| Soap, etc. | 298 49 | |
| Brooms, brushes, etc. | 382 18 | |
| Labor and material. | 5,551 66 | |
| Electric supplies | 439 31 | |
| Decorating | 315 00 | |
| Brick, sand and cement | 308 02 | |
| Electric light service. | 695 98 | |
| Lumber | 422 12 | |
| Repairing dynamo. | 83 50 | |
| Telephone service | 33 75 | |
| Re-lettering signs. | 174 00 | |
| Lamps, etc | 91 35 | |
| Paint, putty and oil | 128 09 | |
| Cash items | 70 34 | |
| Other expenses. | 933 67 | |
| | | <hr/> 40,228 91 |
| <i>Acc't Street and Alley Clean- ing, Office Salary.</i> | | |
| Office salaries. | | 9,649 14 |
| <i>Acc't Ward Inspectors.</i> | | |
| Ward inspectors. | | <hr/> 34,172 57 |
| Carried forward. | | <hr/> \$1,985,937 19 |

| | | | |
|--|----|----------------|----------------|
| Brought forward | | \$1,985,937 19 | |
| <i>Acc't Public Parks—Washington Park.</i> | | | |
| Labor | \$ | 1,204 55 | |
| Other expenses | | 1 01 | |
| | | <hr/> | 1,205 56 |
| <i>Acc't Aldine Square.</i> | | | |
| Labor | \$ | 932 40 | |
| Plants, trees, etc. | | 170 01 | |
| | | <hr/> | 1,102 41 |
| <i>Acc't Douglas Monument Park.</i> | | | |
| Labor | \$ | 778 01 | |
| Trees, plants, etc. | | 221 99 | |
| | | <hr/> | 1,000 00 |
| <i>Acc't Ellis Park.</i> | | | |
| Labor | \$ | 888 29 | |
| Plants, seeds, etc. | | 79 09 | |
| Other expenses | | 32 62 | |
| | | <hr/> | 1,000 00 |
| <i>Acc't Shedd's Park.</i> | | | |
| Labor, etc. | | | 531 90 |
| <i>Acc't Congress Park.</i> | | | |
| Labor | \$ | 400 00 | |
| Cutting and setting curb stones | | 948 58 | |
| | | <hr/> | 1,348 58 |
| <i>Acc't Lakewood Park.</i> | | | |
| Labor | \$ | 169 00 | |
| Trees, seeds, etc. | | 61 00 | |
| | | <hr/> | 230 00 |
| <i>Acc't Gross Park.</i> | | | |
| Labor, etc. | | | 400 00 |
| Carried forward | | | <hr/> |
| | | | \$1,992,755 64 |

| | | |
|--------------------------------|----|----------------|
| Brought forward | | \$1,992,755 64 |
| <i>Acc't Oak Park.</i> | | |
| Labor, etc. | | 833 23 |
| <i>Acc't Green Bay Park.</i> | | |
| Labor, etc. | | 600 00 |
| <i>Acc't Jefferson Park.</i> | | |
| Labor, etc | | 400 00 |
| <i>Acc't Bickerdike Park.</i> | | |
| Labor | \$ | 330 00 |
| Seeds, plants, etc | | 94 87 |
| | | <hr/> 424 87 |
| <i>Acc't Kedzie Park.</i> | | |
| Labor, etc | | 410 00 |
| <i>Acc't Norwood Park.</i> | | |
| Labor | \$ | 22 45 |
| Trees, seeds, etc | | 352 50 |
| Other expenses | | 27 30 |
| | | <hr/> 402 25 |
| <i>Acc't East End Park.</i> | | |
| Labor | \$ | 400 00 |
| Other expenses | | 88 45 |
| | | <hr/> 488 45 |
| <i>Acc't De Kalb Square.</i> | | |
| Labor | \$ | 143 00 |
| Urns, fence and fountain . . . | | 514 48 |
| Plumbing | | 65 00 |
| | | <hr/> 722 48 |
| <i>Acc't Holstein Park.</i> | | |
| Labor, etc | | 400 00 |
| | | <hr/> |
| Carried forward | | \$1,997,436 92 |

| | | | |
|--|----|----------------|----------------|
| Brought forward | | \$1,997,436 92 | |
| <i>Acc't Eldred Park.</i> | | | |
| Labor, etc. | | 400 00 | |
| <i>Acc't Irving Park.</i> | | | |
| Labor, etc. | | 400 00 | |
| <i>Acc't Bridgeport Lock.</i> | | | |
| Services of lock tender. . . . | | 2,600 00 | |
| <i>Acc't Building Dock.</i> | | | |
| Labor. | \$ | 3,464 48 | |
| Other expenses. | | 51 25 | |
| | | <hr/> | 3,515 73 |
| <i>Acc't Salaries.</i> | | | |
| Janitors' salaries. | \$ | 47,602 65 | |
| Bridge Telephone Operators | | 6,554 40 | |
| House-moving Clerks. | | 1,567 00 | |
| Street Depart't office salaries | | 15,354 51 | |
| City Engineer's office salary. | | 12,117 61 | |
| Map Department salary. . . . | | 14,940 00 | |
| Proportional office salary. . . | | 14,209 36 | |
| Street opening and obstruction inspectors' salary. . . . | | 6,980 34 | |
| Vessel Despatcher's salary. . | | 2,250 00 | |
| Bridge Tenders' salary. . . . | | 88,415 00 | |
| Public Library | | 1,036 25 | |
| Deposit for inspection | | 4,113 75 | |
| | | <hr/> | 215,140 87 |
| <i>Acc't Miscellaneous Expenses.</i> | | | |
| Street Department, office expense | \$ | 773 62 | |
| City Engineer's office expense | | 453 65 | |
| Map Department expense .. | | 323 73 | |
| Proportional office expense. | | 269 11 | |
| Improvement east side of La Salle street | | 1,033 23 | |
| | | <hr/> | |
| Carried forward. . . . | \$ | 2,853 34 | \$2,219,493 52 |

| | | | |
|---|----|-----------|------------------------------|
| Brought forward | \$ | 2,853 34 | \$2,219,493 52 |
| Public benefits | | 391 22 | |
| Removal of rock from the west fork of the S. branch of the Chicago river..... | | 15,000 00 | |
| Unpaid pay rolls | | 14,365 08 | |
| | | <hr/> | 32,609 64 |
| Total..... | | | <hr/> \$2,252,103 16 |
| Balance to credit of special fund | | | 7 34 |
| | | | <hr/> |
| | | | <u><u>\$2,252,110 50</u></u> |

SPECIAL DEPOSIT FUND.

| | | |
|--|----|-----------|
| Balance carried forward from 1895 | \$ | 76,171 83 |
|--|----|-----------|

RECEIPTS.

| | | | |
|------------------------------|----|------------|------------|
| Suspense account..... | \$ | 417 22 | |
| Street permit depositors.... | | 133,260 75 | |
| Corporation account..... | | 62,330 27 | |
| Badge account | | 731 00 | |
| | | <hr/> | |
| Total credits..... | \$ | | 272,911 07 |

EXPENSES.

| | | | |
|------------------------------|----|------------|---------------------------|
| Suspense account..... | \$ | 2,694 85 | |
| Street permit depositors.... | | 155,437 06 | |
| Corporation account..... | | 62,115 19 | |
| Badge account | | 25 00 | |
| | | <hr/> | |
| Total expenses..... | | | 220,272 10 |
| | | | <hr/> |
| Balance Jan. 1, 1897... | | | <u><u>\$52,638 97</u></u> |

TRIAL BALANCE.

LEDGER, DEPARTMENT OF PUBLIC WORKS, CHICAGO,
DECEMBER 31, 1896.

| | <i>Dr.</i> | <i>Cr.</i> |
|---|-----------------|-----------------|
| Water fund | \$ 325,382 96 | |
| Water Works | 25,348,192 98 | |
| Water Works, income | | \$42,110,042 28 |
| Water fund, general taxes | | 2,713,878 53 |
| Annexed territory | | 197,525 48 |
| Water loan bonds, 6 per cent. | | 132,000 00 |
| Water loan bonds, 4 per cent. | | 3,191,500 00 |
| Water loan bonds, $3\frac{5}{100}$ per cent. | | 332,000 00 |
| Water loan bonds, $3\frac{1}{2}$ per cent. | | 333,500 00 |
| Water loan bonds, canceled | | 1,516,900 00 |
| Water loan certificates, 5 per cent. | | 1,500 00 |
| Water loan, interest | 7,924,820 65 | |
| Water loan bonds, Hyde Park 5 per cent. | | 50,000 00 |
| Water loan bonds, Town of Lake 5 per cent | | 90,000 00 |
| Water Works, expense and repair acc't. | 17,547,330 19 | |
| Water loan bonds, Lake View 4 per cent. | | 50,000 00 |
| Water loan bonds, Lake View 5 per cent. | | 23,000 00 |
| J. W. Lyons, cashier water office | 2,000 00 | |
| Meter Department, stock account. | 6,748 32 | |
| Water Works shop, stock account | 13,202 89 | |
| Tapping Department, stock account.... | 4,015 90 | |
| Advances to lay water pipe | | 427,500 78 |
| Hydrant wrenches | | 2,346 82 |
| Annexed territory, sewers | | 2,614,224 75 |
| Sewers constructed by Special Assessments | | 6,738,613 96 |
| Sewers, North Division | 2,773,789 50 | |
| Sewers, South Division | 7,061,108 72 | |
| Sewers, West Division | 7,470,608 05 | |
| Carried forward | \$68,477,200 16 | \$60,524,532 60 |

| | | |
|---|------------------|------------------|
| Brought forward | \$68,477,200 16 | \$60,524,532 60 |
| Sewerage loan bonds, 4 per cent | | 2,117,500 00 |
| Sewerage loan bonds, 7 per cent | | 13,000 00 |
| Sewerage loan bonds, 4½ per cent | | 489,500 00 |
| Sewerage loan bonds canceled | | 380,000 00 |
| Sewerage fund, general taxes and construction | | 4,933,532 48 |
| Sewerage maintenance account | | 27,117 70 |
| Sewer stock account | 7,982 62 | |
| Appropriation fund | | 1,492 66 |
| Special assessments | | 7 34 |
| John Freeman, cashier | 1,500 00 | |
| Street lamp fund | 2,920 49 | |
| Gasoline street lamps | 158,699 10 | |
| Gas street lamps | | 161,619 59 |
| Special deposit fund | 52,638 97 | |
| Suspense account | | 4,855 79 |
| Street Engineers | | 134 00 |
| Street permit depositors | | 11,741 52 |
| Advances to construct sewers | | 12,431 37 |
| Corporation account | | 22,770 29 |
| Badge account | | 706 00 |
| | <hr/> | <hr/> |
| | \$ 68,700,941 34 | \$ 68,700,941 34 |
| | <hr/> | <hr/> |

Respectfully submitted,

LOUIS E. GOSSELIN,
Book-keeper Dept. of Public Works.

APPENDIX.

APPENDIX.

For the convenience of the Department of Public Works and officials of the City the following has been added to this report, forming an index with an extract of the franchises granted by the City Council to the various Street Railway Companies, including surface and elevated roads, and also the ordinances passed from time to time extending lines and granting other privileges to such roads, covering a period commencing March 4, 1837, and ending April 1, 1897 :

CALUMET ELECTRIC RAILWAY COMPANY.

(See Map, Page 364.)

For railway on South Chicago avenue, from Seventy-fifth street to Ninety-fifth street; also on Ninety-third street, Ninety-fifth street and Washington avenue; also to the "Nickel Plate" shops, and on Cottage Grove avenue, Michigan avenue, Kensington avenue, Howard street, One Hundred and Fifteenth street and Stony Island avenue; also on Madison avenue, Sixty-seventh street, Cottage Grove avenue, alley in Block 9, Cornell, and on Michigan avenue, One Hundred and Sixteenth street. Passed January 18th, 1892; twenty years.

Same: Street railway on Seventy-fifth street, from Chicago, Rock Island & Pacific Railway to Stony Island avenue. Passed July 25th, 1892; twenty years.

Same: Street railway on Ninety-first street, Stony Island avenue, One Hundred and Nineteenth street, One Hundred and Fifteenth street, Kensington avenue, Noble court, Michigan avenue, Woodlawn avenue, Drexel avenue, and for subway under the I. C. R. R. at Ninety-third street. Passed March 6, 1893; twenty years.

Same: To extend railway on One Hundred and Nineteenth street, from Emerald avenue west to Halsted street; thence south on Halsted street to One Hundred and Twenty-first street. Passed February 18, 1895; twenty years.

Same: Passed November 11, 1895, to continue during life of ordinances heretofore granted to said Company, for extending. Commencing at South Chicago avenue and Eighty-third street, east on Eighty-third street to Bond avenue, north and northwest on Bond



avenue to Cheltenham place, northeast on Cheltenham place to Lake avenue (extended), northwest to Lake avenue (extended) 840 feet to Seventy-eighth street, southeast on Seventy-eighth street to Railroad avenue, northwest on Railroad avenue to Seventy-third street, on Seventy-third street to Stony Island avenue; also beginning at Ninety-third street and Erie avenue, thence north on Erie avenue to Eighty-seventh street, thence northwest on Baltimore avenue to Eighty-third street, making connection with tracks herein provided for, etc.

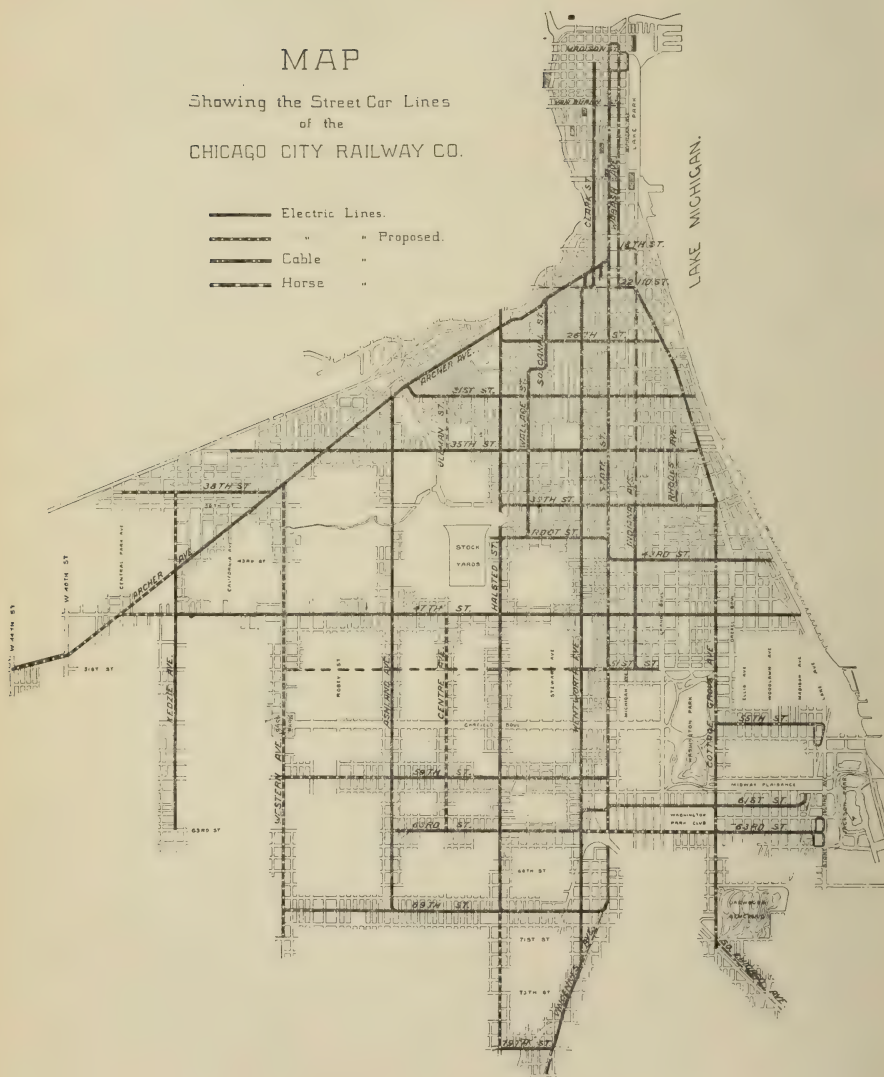
Same: Erie avenue, from Ninety-third street to South Chicago avenue. Ordinance passed June 29, 1896, p. 558; twenty years.

Same: Beginning at the intersection of South Chicago avenue and Seventy-fifth street, thence southeasterly along South Chicago avenue to Ninety-fifth street, thence east along Ninety-fifth street to Avenue K.

Also commencing at the intersection of Ninety-third street with Stony Island avenue, thence west on Ninety-third street to its intersection with Washington avenue, thence south on Washington avenue to the right of way of the Chicago & Western Indiana Railroad Company, thence westerly along and across the alleys in Block ten (10) of the Calumet and Chicago Canal & Dock Company subdivision of that part of the southeast quarter (S. E. $\frac{1}{4}$) of Section two (2), Township 37 north, Range 14 east, to the east line of the New York, Chicago & St. Louis Railroad and north of Chicago & Western Indiana Railroad, thence on private property to west line of New York, Chicago & St. Louis Railroad Company's shop grounds, thence northwesterly to Ninety-third street, thence west on Ninety-third street to Cottage Grove avenue, thence north on Cottage Grove avenue to Seventy-second street. Also south on Cottage Grove avenue from Ninety-third street to Ninety-fifth street, and west on Ninety-fifth street from Cottage Grove avenue to South Park avenue, extended. Also commencing at the corner of Ninety-third street and Cottage Grove avenue, thence west on Ninety-third street to South Park avenue, extended. Thence southerly on property of the Calumet and Chicago Canal & Dock Company to Ninety-fifth street, thence west on Ninety-fifth street to State street, and also commencing at the intersection of Ninety-fifth street and Michigan avenue, thence south on Michigan avenue to Kensington avenue, thence east on Kensington avenue to Howard street, thence north on Howard street to One Hundred and Fifteenth street, thence west on One Hundred and Fifteenth street to Michigan avenue. Also commencing at the intersection of Ninety-third street and Stony Island avenue, south on

Showing the Street Car Lines
of the
CHICAGO CITY RAILWAY CO.

| | |
|-------|-----------------|
| ————— | Electric Lines. |
| ————— | " " Proposed. |
| ————— | Cable " |
| ————— | Horse " |



Stony Island avenue to One Hundred and Third street. Also commencing at the intersection of South Chicago avenue with Madison avenue, thence north on Madison avenue to Sixty-seventh street, thence east on Sixty-seventh street to Stony Island avenue. Also from Cottage Grove avenue across Lot forty-one (41), in Block nine (9), Cornell, to an alley south of and parallel to the right of way of the Pittsburgh, Ft. Wayne & Chicago Railway Company in said Block nine (9), Cornell, thence along said alley to Lot one (1), Block nine (9), Cornell.

Also commencing at the corner of Michigan avenue and Kensington avenue, thence south on Michigan avenue to One Hundred and Nineteenth street, thence west on One Hundred and Nineteenth street to Wentworth avenue, thence north on Wentworth avenue to One Hundred and Sixteenth street, thence east on One Hundred and Sixteenth street to Michigan avenue.

CALUMET ELECTRIC AND SOUTH CHICAGO CITY RAILWAY COMPANIES.

(See Map, Page 364.)

For street railway on Stony Island avenue, Sixty-seventh and Seventy-ninth streets. Passed October 10, 1892; twenty years.

CHICAGO CITY RAILWAY COMPANY.

(See Map, Page 366.)

First incorporated February 14, 1859, for twenty-five years. Charter renewed February 6, 1865, for ninety-nine years. First franchise granted August 16, 1858, to Henry Fuller, Franklin Parmalee and Liberty Bigelow, et al.; on State street, Ringgold place, Cottage Grove avenue, Archer road and Madison street, for twenty-five years. May 23, 1859, ordinance for railway in the South and West Divisions, viz.: Lake street to the present or future City limits; Randolph street (or Park street) to intersect the Lake street track at Union Park; Desplaines street, from Lake street to Milwaukee avenue; on Milwaukee avenue from Desplaines street to City limits (present or future); Canal street, from Lake street to Polk street; Harrison street, from Canal street to Southwestern plank road and Blue Island avenue; Market street, from Lake street to Madison street; Wells street or Fifth avenue (south) from Randolph street to Polk street, thence west on Polk street to Canal street; Van Buren street, from State street to Southwestern plank road; Blue Island avenue, from Harrison street to Chicago, Burlington & Quincy Railroad; Twelfth street, from State street east to Wabash avenue, south on Wabash avenue to

Old street, east on Old street to Indiana avenue, south on Indiana avenue to Cottage Grove avenue, also in Twelfth street from State street to Blue Island avenue. Passed May 23, 1859. Franchise good for twenty-five years from date of incorporation. Act of Legislature, February 14, 1859.

Same: By ordinance passed July 30, 1883 (as amended August 6, 1883). This Company is granted twenty years extension of franchise upon all existing street railway lines. (Sec. 2902 M. C. of 1890.)

Same: Railway on Wabash avenue, from Twenty-second to Madison street, and west on Madison to State. Passed December 21, 1894; no time limit.

Same: On East Van Buren street, from State to fifty feet east of Wabash avenue. Passed March 26, 1877; twenty years.

Same: Halsted street, from Thirty-ninth street to South branch Chicago river. Passed July 9, 1877; twenty years.

Same: (Cable power.) Authorizing change to cable. Trains to be not more than two cars and the grappling car. Passed January 17, 1881.

Same: On Wabash avenue, from Madison to Lake street, and north to connect with Chicago West Division Railway at Randolph street and Lake street. Cable permitted. Passed July 11, 1881. Grant twenty years, and until the Council grant privilege to some other person.

Same: On Archer avenue to Western avenue; Pitney avenue, from Archer avenue to Thirty-first street, thence on Thirty-first street to Lake Park avenue; Hanover street, from Archer avenue to Twenty-ninth street, on Twenty-ninth street to Wallace street, thence south to Thirty-ninth street; Ashland avenue, from Archer to Thirty-ninth street; Thirty-fifth street, from Cottage Grove avenue to Stanton avenue, thence south on Stanton avenue to Thirty-ninth street. Cable power permitted. Passed May 26, 1884; twenty years.

Same: On Twenty-second street, from State to the river; Twenty-sixth street, from Cottage Grove to Halsted; Thirty-fifth street, from State to Ullman; Ullman, from Thirty-first to Thirty-fifth; Pitney avenue, from Archer avenue to Chicago & Alton Railroad. Cable permitted. Passed February 25, 1887; amended October 8, 1888; twenty years.

Same: On Wallace street, from Twenty-sixth to Thirty-first. Passed October 24, 1887; twenty years from June 13, 1887.

Same: On Dearborn street, between Twentieth and Twenty-first streets, and on Twenty-first street from Dearborn to State. Passed February 25, 1889; twenty years from July 30, 1883.

Same: On Halsted street, from Sixty-ninth to Seventy-ninth streets. Extending time for construction until sixty days after sewer shall have been completed. Passed May 19, 1890.

Same: On Jefferson avenue, upon the removal of existing tracks, between Jefferson and Lake avenues; Forty-sixth and Forty-seventh streets; eight feet farther south, permitting it to connect with present tracks on Jefferson and Lake avenues. Passed November 10, 1890.

Same: On Seventy-fifth street, from Chicago, Rock Island & Pacific Railway to South Chicago branch of Illinois Central Railroad. Passed March 24, 1891; twenty years.

Same: Additional tracks on Thirty-ninth street, between Wentworth avenue and Halsted street. Passed October 19, 1891; ending February 5, 1907.

Same: "Loop" on Madison street, Michigan avenue, Randolph street and Wabash avenue. Passed March 21, 1892; ending July 30, 1903.

Same: On Seventy-fifth street, from Chicago, Rock Island & Pacific Railway to Greenwood avenue. Passed March 21, 1892; twenty years.

Same: On Halsted street, from Sixty-ninth street to Summit avenue, and on Summit avenue to Eighty-seventh street. Passed March 21, 1892, and May 2, 1892; each twenty years. (See later ordinance passed July 16, 1894, for twenty years, reading "On Halsted street, from Sixty-ninth street to Seventy-ninth street.")

Same: On Thirty-fifth street, from State street to Rhodes avenue. Passed March 21, 1892; twenty years.

Same: On Thirty-fifth street, from Ullman street to California avenue. Passed March 21, 1892; twenty years.

Same: For a "Loop" on Sixty-second street, Sixty-third street, Sixty-fourth street, Grace avenue and Stony Island avenue. Passed March 14, 1892; twenty years.

Same: On Forty-seventh street, from Cottage Grove avenue to State street, from State street to Ashland avenue, and from Ashland avenue to Southwestern boulevard. (Two Ordinances.) Passed March 21, 1892; twenty years.

Same: For "Loop" on Sixty-first street, Madison avenue, Sixty-first court, South Park court and Stony Island avenue. Passed March 21, 1892; twenty years.

Same: Permit for electricity on Halsted street, Archer avenue, Thirty-eighth street, Thirty-fifth street, Forty-seventh street, Sixty-first street, Cottage Grove avenue, Sixty-third street, Sixty-fourth street, Madison avenue, Grace avenue, Indiana avenue (from Thirty-ninth to Fifty-first), and on Fifty-first street. Passed March 21, 1892.

Same: On South Park court, from Sixtieth to Sixty-first street. Passed July 21, 1892; twenty years.

Same: Permit to conduct electric power from power-house at Fifty-second street and Wabash avenue to sundry points; also permit to operate cars by overhead trolley on State street, from Sixty-first street to the viaduct, and over the viaduct to Wentworth avenue to Sixty-third street, and on Sixty-third street to west terminus of tracks. Passed February 23, 1893.

Same: Railway on Sixty-third street, from Cottage Grove avenue to State street. Passed April 4, 1894; twenty years.

Same: For underground conduit at Wabash avenue and Twenty-first street. Passed April 4, 1894. To extend during the life of the street railway ordinances at these points.

Same: Permit for electricity "trolley" on Twenty-sixth street, Thirty-first, Thirty-ninth, Fifty-first, Sixty-ninth and Seventy-ninth streets, Archer avenue, Forty-third street, Halsted street, Wentworth avenue, Ashland avenue, Hanover street, Wallace street, State street from Sixty-third street to Vincennes avenue, and thence on Vincennes avenue to terminus of the railway. Passed April 4, 1894; ten years.

Same: Railway on Wallace street from Thirty-ninth to Root street. Passed April 4, 1894; twenty years.

Same: July 16, 1893, changing to electricity on Twenty-sixth, Thirty-first, Thirty-ninth, Fifty-first, Sixty-ninth and Seventy-ninth streets.

Same: Archer avenue from river west to Thirty-eighth street, thence to terminus in Thirty-eighth street.

Same: Forty-third street from eastern terminus on that street west to State street, thence on State street to Root, thence on Root street to terminus on said Root street.

Same: Halsted street, from Archer avenue to southern terminus of tracks on said Halsted street.

Same: Wentworth avenue, from Archer avenue to southern terminus.

Same: Ashland avenue, from Archer avenue to southern terminus.

Same: South Chicago avenue, from Seventy-first to Seventy-fifth street.

Same: Hanover street (now South Canal), Butler and Wallace, respectively.

Same: State street, from Sixty-third street to Vincennes avenue, and thence to terminus on said Vincennes avenue.

Same: Eighteenth street and Indiana avenue (upon consent being obtained from majority of property owners), \$100,000 to be paid by said Company for electric street lighting and \$150,000 to be paid in connection with the elevation of the Chicago, Rock Island & Pacific and Lake Shore and Michigan Southern Railway tracks and subways at various streets.

Same: On Sixty-third street, from Cottage Grove avenue to State street. Passed July 16, 1894; twenty years.

Same: On Centre avenue, from Forty-seventh to Sixty-third street, to connect with present tracks on Forty-seventh and in Sixty-third streets. Passed July 16, 1894; twenty years.

Same: On Wallace street, from Thirty-ninth to Root street. Passed July 16, 1894; twenty years.

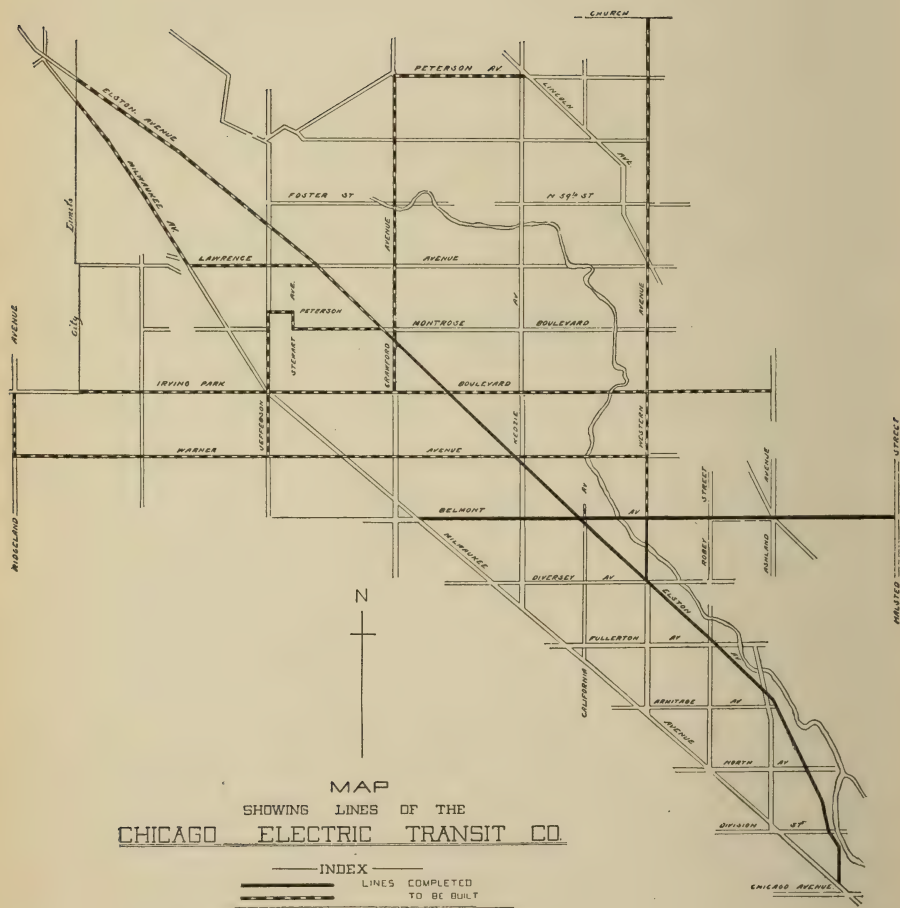
Same: On Halsted street, from Sixty-ninth to Seventy-ninth street, to connect with present line on Halsted street (Electric). Passed July 16, 1894; twenty years.

Same: Conduit in Twenty-first street. Rights to cease when rights and privileges to Chicago City Railway Company shall cease upon State street and Wabash avenue at Twenty-first street. For conduit in Twenty-first street, from tracks of Chicago City Railway Company in State street to tracks of said company in Wabash avenue. Passed July 16, 1894.

Same: For tracks on Forty-seventh street, Kedzie avenue, Archer avenue, Western avenue, Sixty-ninth street, Seventy-ninth street, Thirty-eighth street, Fifty-ninth street. Passed July 8, 1895; twenty years.

Same: For electricity on Archer avenue, from river east to State; Clark street, from Adams to Twenty-second, thence east to Wentworth avenue, and thence south; Ullman street, Halsted street, Twenty-second street, Dearborn street and Thirty-ninth street. Passed July 15, 1895.

Same: Trolley on Clark street to Washington street. Amending ordinance of July 15, 1895, so as to read "Washington street," in place of "Adams street." Passed November 11, 1895.



Same : Extending the time for the completion of the tracks on Sixty-third street, from Cottage Grove avenue to State street. Passed April 8, 1896.

Same : Fifty-first street, from State street to Western avenue. Ordinance passed July 6, 1896. P. 632.

Same : Wentworth avenue, from Thirty-ninth to Twenty-second street ; Wentworth avenue, from Twenty-second street to Archer avenue. Ordinance passed June 11, 1896. P. 404 ; twenty years.

CHICAGO AND ENGLEWOOD HORSE AND DUMMY R. R. CO.

Ordinance extending time for construction to six months after a sewer shall have been constructed in Wentworth avenue. Passed July 23, 1877.

Same : For railway on Wentworth avenue, from Thirty-ninth street to Twentieth street. For animal power only, street improvements (8 feet or 16 feet), speed, rate of fare, commutation tickets, etc., funeral cars, limit of charge for, etc. Passed July 31, 1876 ; twenty years.

CHICAGO ELECTRIC TRANSIT COMPANY.

(See Map, Page 372.)

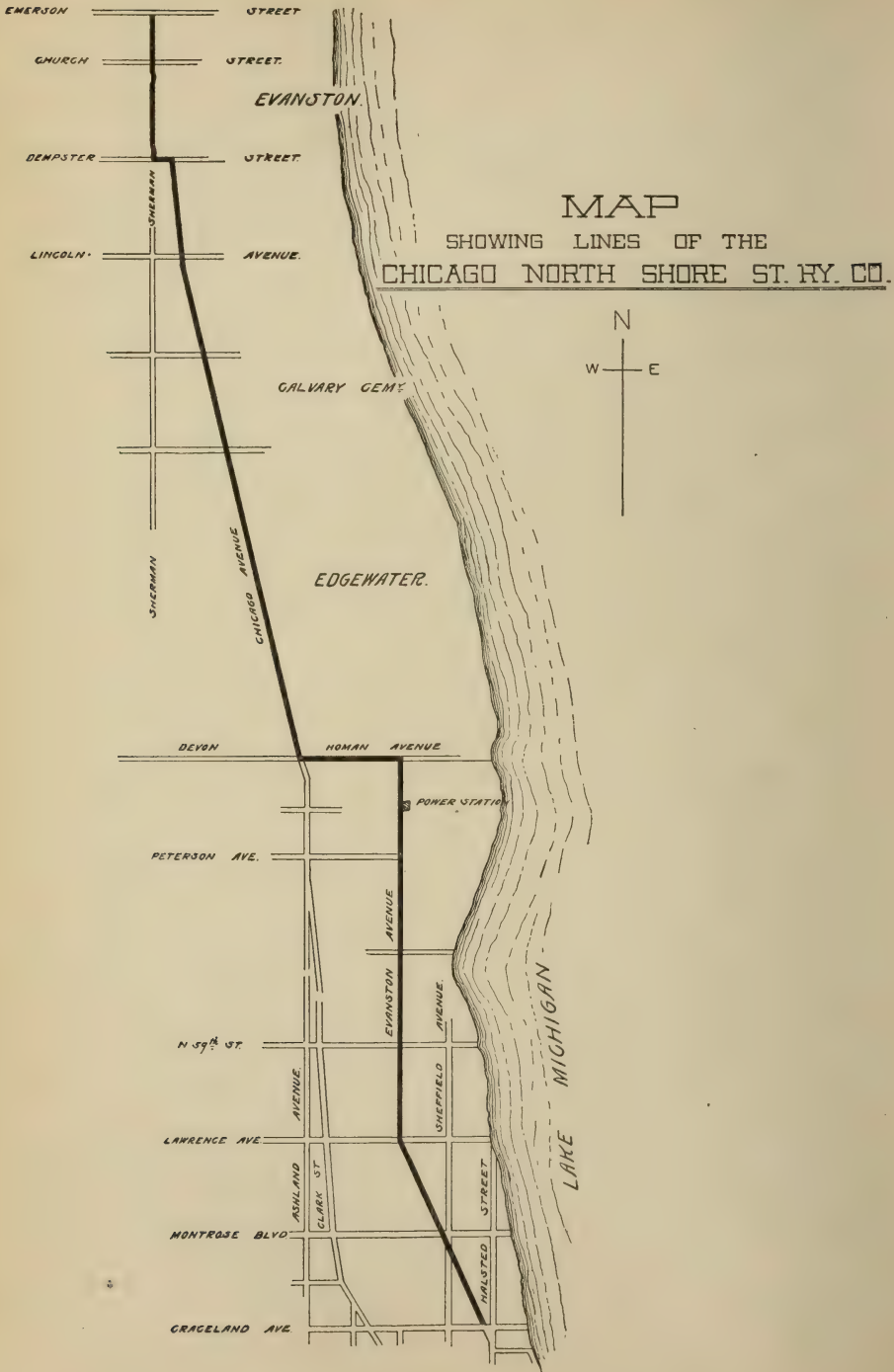
Commencing at the southwest line of Milwaukee avenue, thence east to Belmont avenue to northwest line of Elston avenue ; in Belmont avenue, from Western avenue to Robey street ; in Belmont avenue, from Ashland avenue to North Halsted street. Passed February 11, 1895 ; twenty years.

Same : On Irving Park boulevard and Graceland avenue, between west line of Milwaukee avenue and east line of Ashland avenue. Passed October 21, 1895 ; twenty years.

CHICAGO ELECTRIC TRANSIT COMPANY.

(Successor to Jefferson Street Railway Company.)

Ordinance passed November 23, 1896. P. 1149, Section 1.—That providing the said Chicago Electric Transit Company shall lay any tracks on that portion of Irving Park boulevard between the west line of Milwaukee avenue and westerly City limits before the sewer is placed in the center of the street by the City authorities, the sewer shall be laid on either side of the street so as not to disturb or interfere with the railroad tracks heretofore and hereby authorized.



CHICAGO AND EVANSTON ELECTRIC RAILWAY COMPANY.

Street railway on Lawrence avenue, from Clark street to Evanston avenue, and thence on Evanston avenue to north City limits, and on Church street from Evanston avenue to Clark street. Animal power prohibited. Passed April 11, 1892; twenty years.

Same: Ordinance amending above by eliminating "Lawrence avenue," and permitting railway on Evanston avenue, from Grace-land avenue to north City limits, and on Church street between Evanston avenue and Clark street. Passed April 25, 1892; twenty years.

Note: See Chicago & North Shore Street Railway Company.

CHICAGO NORTH SHORE STREET RAILWAY COMPANY.

(See Map, Page 374.)

Amending ordinance of April 11 and April 25, 1892, striking out the name "Chicago and Evanston Electric Street Railway Company," etc., and for franchise in connection with the North Chicago City Railway Company, and the North Chicago Street Railroad Company. Passed April 5, 1893; franchise extends to April 1, 1912.

Same: Franchise of Chicago and Evanston Street Railway Company, confirmed in this company. Passed March 20, 1893.

CHICAGO AND JEFFERSON URBAN TRANSIT COMPANY.

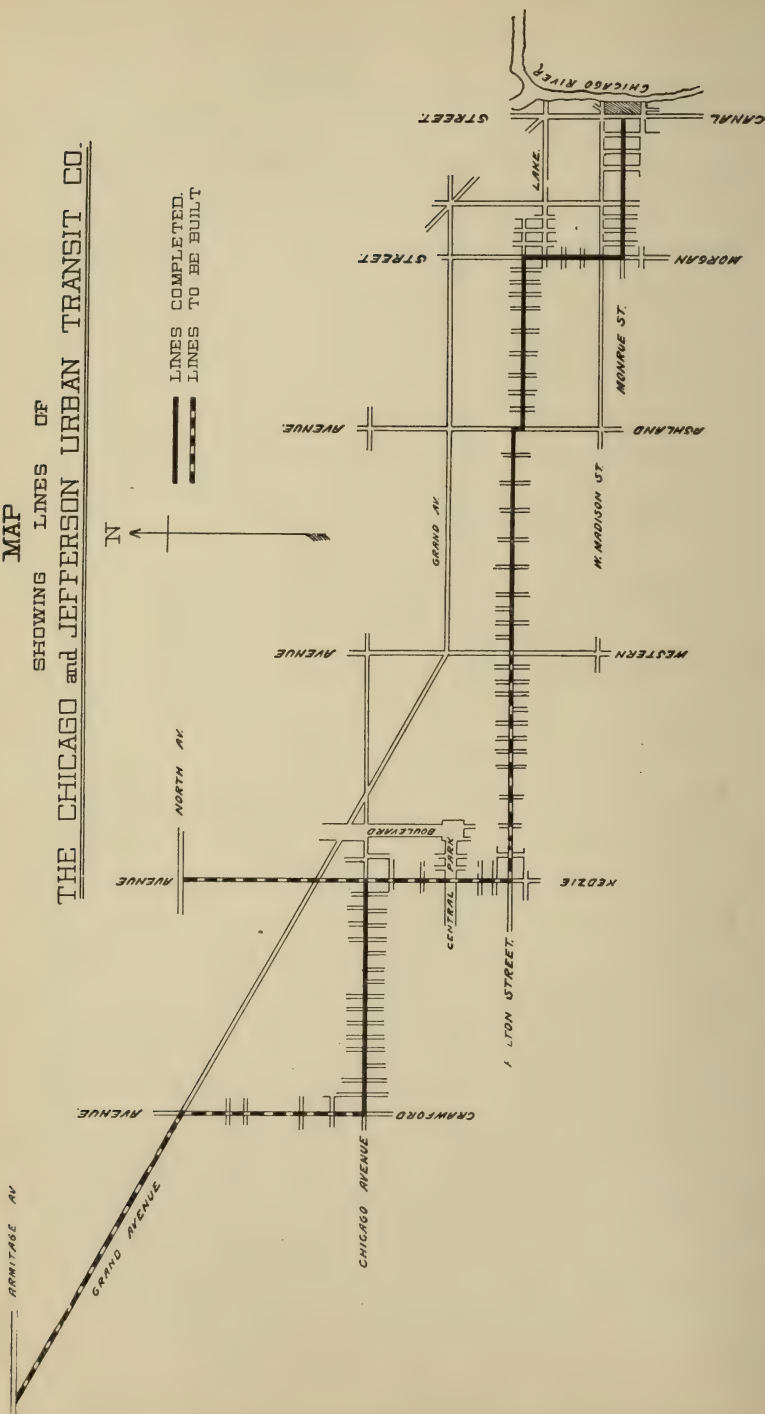
(See Map, Page 376.)

Street railway on Monroe street, from Canal street to Morgan street, on Morgan to Fulton, and on Fulton to Western avenue. To pay the City \$7,143 per mile, for the twenty-year privilege, for each mile of railway permitted. Passed April 11, 1892; twenty years.

Same: Railway on Fulton street, between Western and Kedzie avenues; Kedzie avenue, between Fulton street and North avenue; Chicago avenue, between Kedzie avenue and Crawford avenues; Crawford avenue, between Chicago avenue and Grand avenue, and on Grand avenue between Crawford avenue and Armitage avenue. Passed July 14, 1892; twenty years.

Same: Passed February 18, 1895; amending ordinance of April 11, 1892, by changing mode of propulsion to electricity.

MAP
SHOWING LINES OF
THE CHICAGO and JEFFERSON URBAN TRANSIT CO.



CHICAGO WEST DIVISION RAILWAY COMPANY.

(See Map, Page 378.)

Incorporated February 21, 1861. Tracks on Halsted street, from Lake street to Milwaukee avenue, in lieu of railway on Desplaines street. Passed March 28, 1864; no time limit.

Same: By ordinance passed June 30, 1883 (as amended August 6, 1883), this company is granted twenty years extension of franchise upon all existing street railway lines. (Sec. 2902, M. C. of 1890.)

Same: On Clinton street, from Madison street to Twelfth street (double track to Harrison street and single to Twelfth street). Passed August 17, 1864; no limit.

Same: Meagher street, from Canal street to Jefferson street. Passed August 17, 1864; no limit.

Same: On Chicago avenue, from the river west to present or future City limits. Passed August 17, 1864; no limit.

Same: On Indiana street, from Milwaukee avenue to present or future west City limits. Passed August 17, 1864; no limit.

Same: On Indiana street, same as above. Passed August 9 and 11, 1875; twenty years.

Same: On Catherine street, from Blue Island avenue to Robey street. Passed August 17, 1864; no limit.

Same: On Polk street, from Canal to Jefferson street. Passed August 17, 1864; no limit.

Same: On Desplaines street, from Van Buren to Sebor street. Passed August 17, 1864; no limit.

Same: On Sebor street, from Desplaines street to Halsted street. Passed August 17, 1864; no limit.

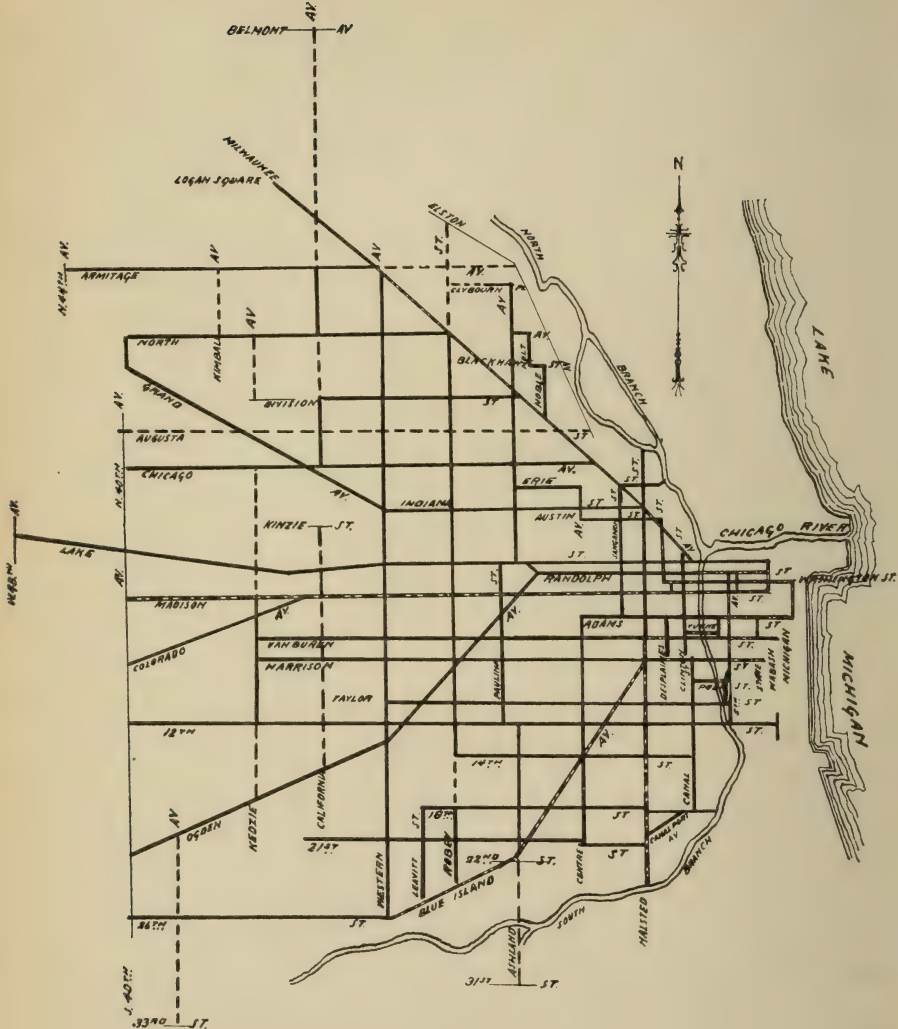
Same: On Halsted street, from Harrison street south to the river. Passed August 17, 1864.

Same: On Van Buren street, from Ogden avenue to Western avenue. Passed November 13, 1871; no limit.

Same: On Madison street, permit to extend on Madison street from Rockwell street to Central park, instead of on Lake street, if the Company wish. Passed April 9, 1872, and June 24, 1878; twenty years, or until sold to other parties.





Same: On North avenue, from Milwaukee avenue to present or future City limits. Passed March 8, 1875; amended April 19, 1875; franchise to October 1, 1894, and until City buys it.

Same: On Blue Island avenue, from Rebecca street to Twenty-second street. Passed February 28, 1876; for twenty years and until the City buys it.



MAP
SHOWING LINES OF THE
WEST CHICAGO STREET R. R.

INDEX

-  CABLE LINES
-  HORSE CAR LINES
-  ELECTRIC LINES
-  PROPOSED LINES TO BE BUILT

Same: On Ogden avenue, from Madison street to Western avenue. Passed February 28, 1876; twenty years.

Same: On Halsted street, from Harrison street south to the river. Passed September 25, 1876; twenty years, and until the City Council shall elect to grant the privileges to some other party to purchase this franchise.

Same: On O'Neil street, from Halsted street to its car house. Passed November 27, 1896; no limit.

Same: On Harrison street, from Clinton street to Canal street. Passed March 26, 1877; for twenty years, and until sold to other parties.

Same: On Canal street, from Harrison street to Canalport avenue. Passed March 26, 1877; twenty years and until sold to other parties.

Same: On Canalport avenue, from Canal street to Halsted street. Passed March 26, 1877; twenty years, and until sold to other parties.

Same: On Twelfth street, from Canal street to Ashland avenue. Passed March 26, 1877; twenty years, and until sold to other parties.

Same: On Lake street, from present tracks (Western avenue or Rockwell street), to Central park (now Garfield park). Passed April 9, 1877.

Same: On Twelfth street, from Ashland avenue to Ogden avenue. Passed August 26, 1878; twenty years.

Same: On Blue Island avenue, from present terminus (Twenty-second street) to Western avenue. Passed October 14, 1876; twenty years.

Same: On Western avenue, from Van Buren street to Madison street, and to connect with car house on Western avenue at Washington street. Passed December 23, 1878; twenty years, or until sold to other parties.

Same: On Chicago avenue, from Milwaukee avenue to Western avenue. Passed October 20, 1879; twenty years, and until franchise is sold to other parties.

Same: On Lake street, from Rockwell street to Central Park, and from Union Park east and over Lake street bridge to State street, and from State street, a single track to Wabash avenue. Passed November 29, 1880; twenty years; Company to pay one-half cost of new bridge at Lake street, and pay \$1,000 annually to maintain, etc.

Same: On Milwaukee avenue, to make connection at Clinton and Lake streets. Passed November 29, 1880; twenty years.

Same : On Leavitt street, from Chicago avenue to Indiana street. Passed July 17, 1882 ; twenty years.

Same : On Ogden avenue, from Western avenue to west City limits. Passed February 7, 1881 ; twenty years.

Same on North avenue, from Holt street to Ashland avenue. Passed May 11, 1885 ; twenty years.

Same : On Division street, from Milwaukee avenue to 200 feet west of California avenue. Passed December 7, 1885 ; twenty years.

Same : On Van Buren street, from Western avenue to Kedzie avenue. Passed December 7, 1885 ; twenty years.

Same : On Ogden avenue, from Madison street to Randolph street. Passed December 9, 1885 ; twenty years.

Same : Authorized by ordinance of March 30, 1888. Company to pay one-half costs of new Lake street bridge and \$1,000 to maintain.

Same : For removal of tracks on Twelfth street from centre of street, and lay tracks on each side of street. Passed September 3, 1888.

CHICAGO PASSENGER RAILWAY COMPANY.

For railway on Harrison street, from Desplaines street east to State street, over Harrison street bridge. Company to pay all damages to abutting property owners. Passed December 31, 1885 ; twenty years.

Same : Center avenue line on Adams street, from Desplaines street to Center avenue, on Center avenue from Adams street to Twenty-first street, and on Twenty-first street, from Center avenue to Western avenue. Passed January 11, 1876 ; twenty years.

Same : On North Ashland avenue, from North avenue to Erie street ; Erie street, from Ashland to Center avenues ; Center avenue, from Erie street to Austin avenue ; Washington street, from Desplaines street to Michigan avenue, and through the Washington street tunnel, etc. Passed February 1, 1886 ; twenty years. Amended *in re* care and improvement of the Washington street tunnel. February 8, 1886.

Same : Michigan avenue, from Adams to Washington street. Passed February 1, 1886 ; twenty years.

Same : On Austin avenue, from Center avenue to Desplaines street ; Desplaines street, from Austin avenue to Adams street ; Franklin street, from Harrison street to Washington street. Passed February 1, 1886 ; twenty years.

Same : On Adams street, from Clark street to Michigan avenue. Passed April 8, 1886 ; twenty years.

Same : On Sangamon street, between Austin avenue and Adams street. Passed March 22, 1886 ; twenty years.

Same : Cable power authorized, and use of Washington street tunnel, the latter to be repaired and maintained, construct roadway, light, ventilate, free from water, keep walls whitened, keep so vehicles may pass through, speed no greater than four miles per hour, etc., all this at company's expense. Passed March 30, 1888. Time limit governed by prior ordinances.

Same : Franchise granted the Chicago Horse and Dummy Railway Company, changed to "Chicago Passenger Railway Company," confirmed by ordinance passed March 21, 1887.

CHICAGO HORSE AND DUMMY RAILWAY COMPANY.

Changed to the "Chicago Passenger Railway Company," and change confirmed by ordinance. Passed March 31, 1887.

CHICAGO PASSENGER RAILWAY COMPANY.

(Chicago Horse and Dummy Railway Company.)

For street railway on Adams street, from Clark street to Desplaines ; Desplaines street, from Adams to Harrison ; Harrison street, from Desplaines to Western avenue ; Western avenue, from Harrison street to Twelfth street ; Twelfth street, from Western avenue to Crawford avenue ; for new bridge at Adams street, Street Railway Company to pay one-half of all costs for same, including piers, abutments, machinery, etc., and to pay \$1,000 annually for maintenance, etc., to pay cost of widening or building new viaduct at Adams street. Passed April 21, 1884 ; twenty years.

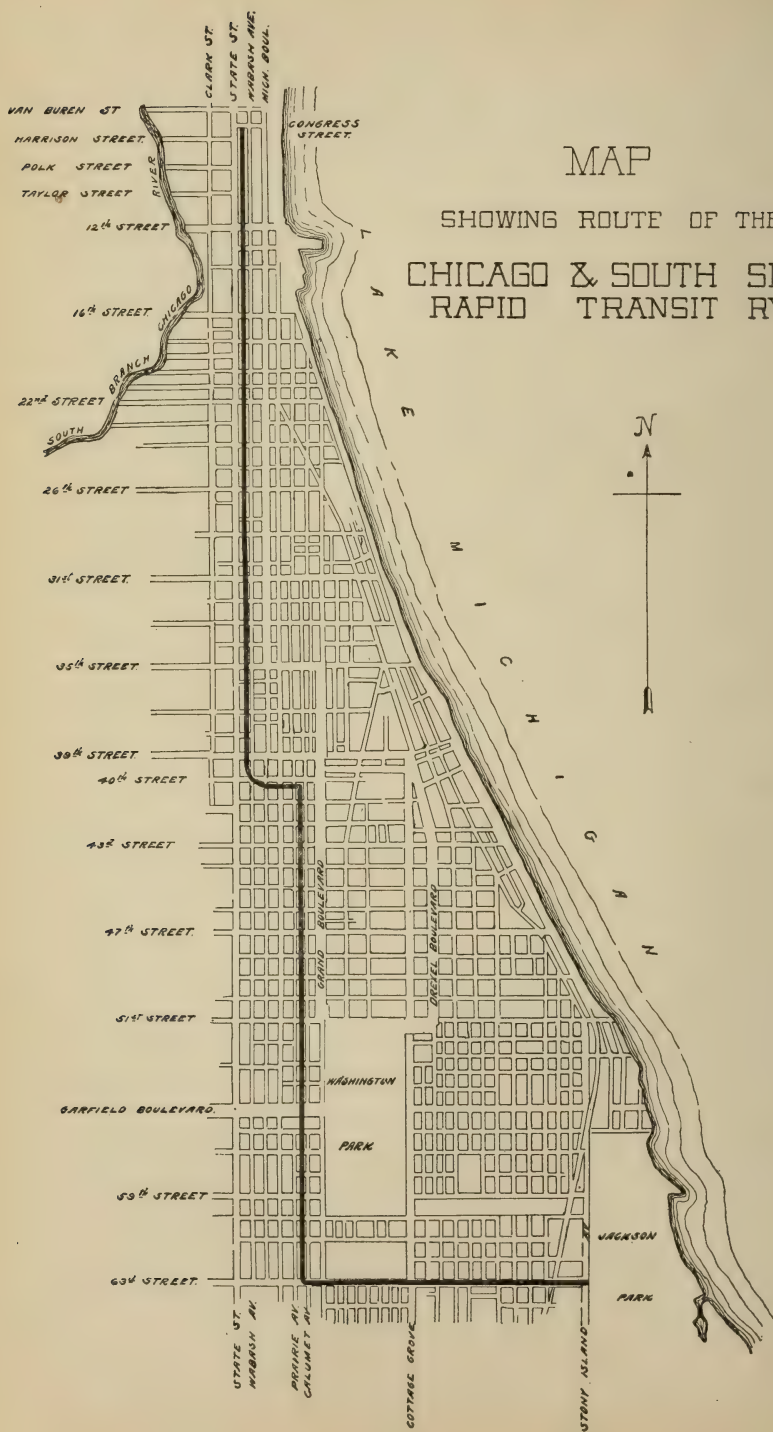
Same : Use of Washington street tunnel and cable authorized. Passed March 30, 1888.

CHICAGO PASSENGER TRACTION COMPANY.

On Fullerton avenue (commencing at intersection of Milwaukee avenue), Central avenue, Maynard avenue and Tanner road. Passed June 20, 1895 ; twenty years.

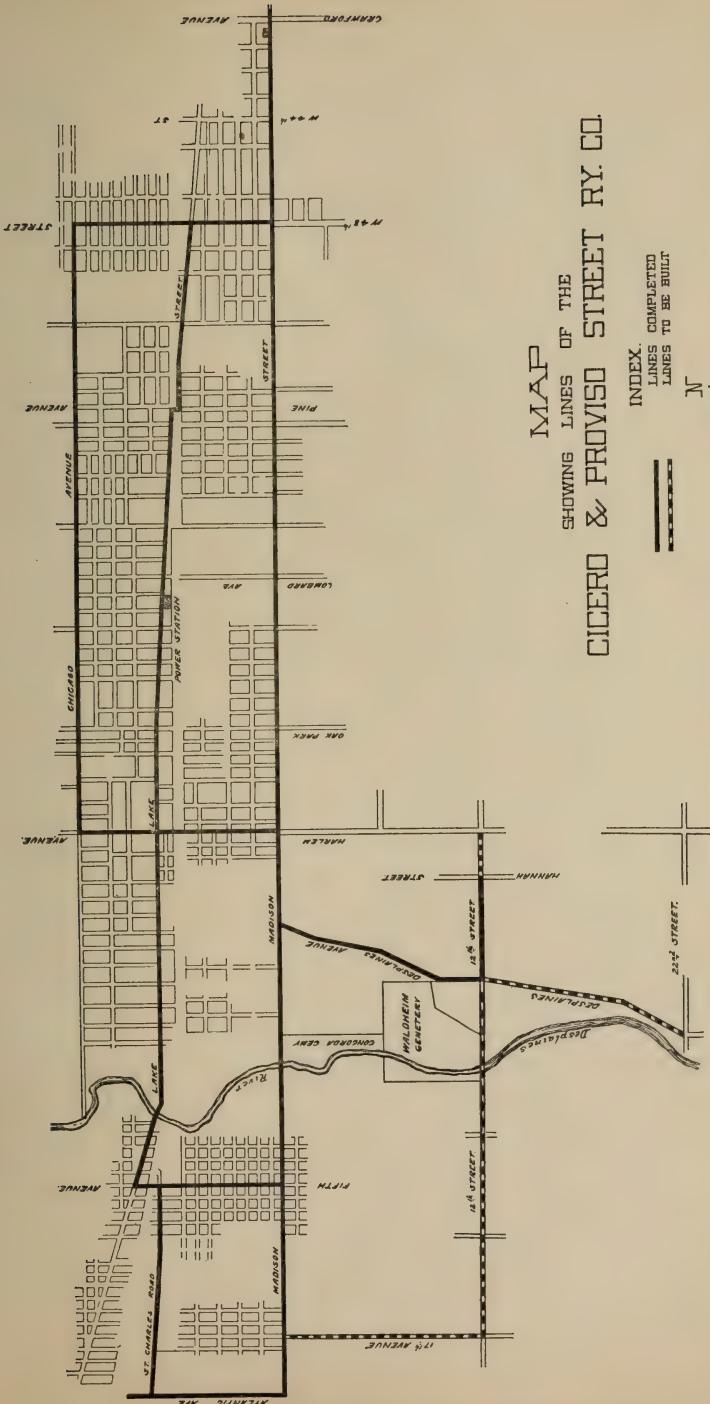
MAP

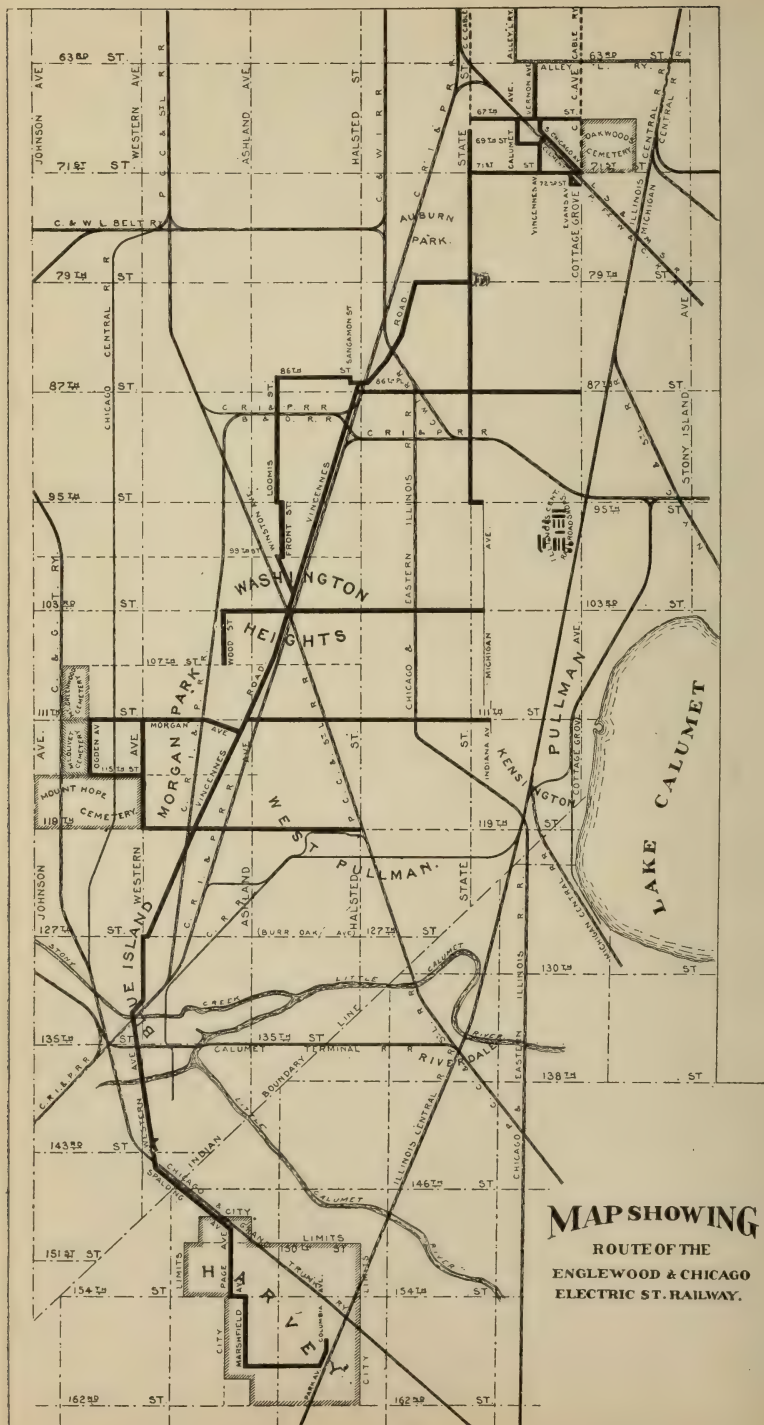
SHOWING ROUTE OF THE CHICAGO & SOUTH SIDE RAPID TRANSIT RY.



MAP
SHOWING LINES OF THE
CICERO & PROVIDO STREET RY. CO.

INDEX.
— COMPLETED
- - - LINES TO BE BUILT





CHICAGO & SOUTH SIDE RAPID TRANSIT R. R. COMPANY.

("Alley L.")

(See Map, Page 382.)

Franchise for elevated railroad commencing at the north side of Van Buren street, south between Dearborn street and Wabash avenue to Thirty-ninth street, east to Forest avenue; right of way not to exceed thirty feet, except at curves, etc.; not more than three tracks allowed; locomotive or other engines or motors and cars allowed; for passenger traffic and mails only; City may regulate speed; City may erect viaducts, change grades, etc., with liability to the railway; \$50.00 car license fee. Passed March 26, 1888; fifty years.

Same: Above ordinance is amended April 2, 1891, permitting extension of the line south from Thirty-ninth street; east to Jackson Park; west to a point between Wentworth avenue and Wallace street, and south to Seventy-first street; also to pay \$4,000 per mile, annually, for the part of the road in the alley, from Congress street to Twelfth street.

Same: An ordinance amending ordinance of March 26, 1888, and for extension on Sixty-third street. Passed April 7, 1892.

CICERO & PROVISIO STREET RY. COMPANY.

(See Map, Page 383.)

Along West Forty-eighth street, from West Lake street to West Chicago avenue, and on West Chicago avenue, from Forty-eighth to Forty-second street. Passed July 23, 1894; twenty years.

ENGLEWOOD AND CHICAGO ELECTRIC STREET RAILWAY.

(See Map, Page 384.)

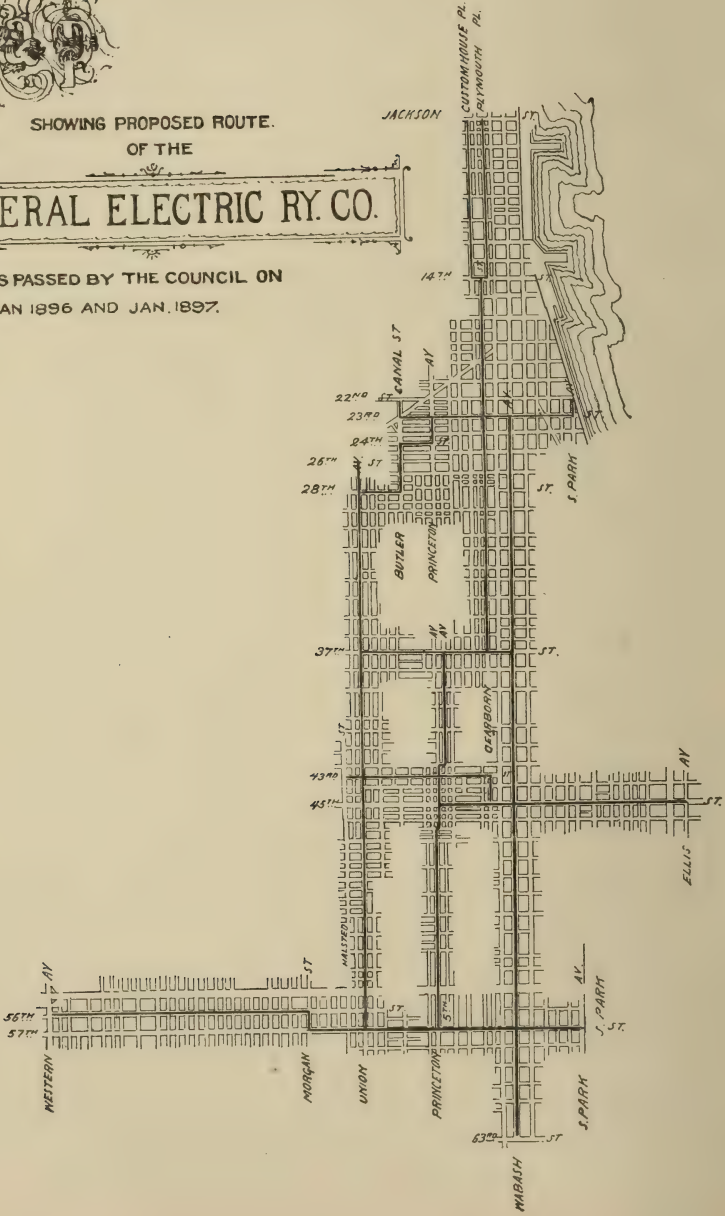
For street railway on Vernon avenue, Sixty-seventh street Vincennes avenue, South Chicago avenue, Keefe avenue, Sixty-ninth street, Calumet avenue, Clement avenue, Seventy-first street, Evans avenue, Seventy-second street, Cottage Grove avenue, State Street, Ninety-fifth street, Seventy-ninth street, Vincennes road, Eighty-seventh street, Eighty-sixth place, Sangamon street, Eighty-sixth street, Loomis street, Ninety-fifth street, Front street, Ninety-ninth street, Winston avenue, One Hundred and Third street (Tracy avenue), Wood street, and One Hundred and Eleventh street. Passed (over veto) May 2, 1895; twenty years.



SHOWING PROPOSED ROUTE.
OF THE

GENERAL ELECTRIC RY. CO.

AS PASSED BY THE COUNCIL ON
JAN 1896 AND JAN. 1897.



GENERAL ELECTRIC RAILWAY COMPANY.

(See Map, Page 386.)

Beginning at Twenty-third street and Dearborn street, north on Dearborn street to Fourteenth street, east on Fourteenth street to Plymouth place, north on Plymouth place to Jackson street; also on Custom House place from Jackson street to Fourteenth street; east on Fourteenth street from Custom House place to Dearborn street; also beginning at Twenty-third street and Dearborn street, south on Dearborn street to Thirty-seventh street; west on Thirty-seventh street to Fifth avenue (formerly Atlantic street); south on Fifth avenue to Forty-third street; west on Forty-third street to Princeton avenue, south on Princeton avenue to Forty-seventh street; also beginning at Wabash avenue and Fifty-seventh street, west on Fifty-seventh street to Morgan street, north on Morgan street to Fifty-sixth street, west on Fifty-sixth street to Western avenue, with right to connect, etc. With right for a viaduct at Twelfth street. Passed January 13, 1896; twenty years.

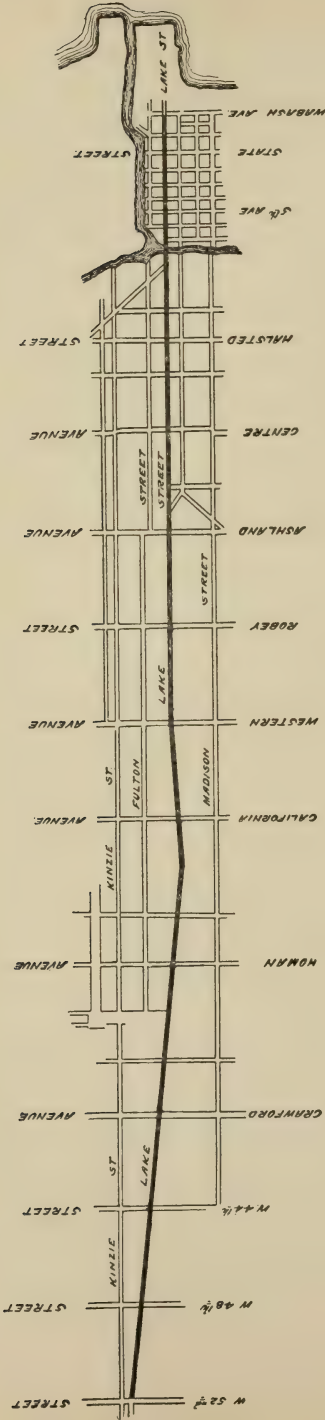
Same: Ordinance passed January 25, 1897, p. 1501. Twenty-third street, from South Park avenue to Canal street; Canal street, from Twenty-second to Twenty-third street; Princeton avenue, from Twenty-third to Twenty-fourth street; Twenty-fourth street, from Princeton avenue to Butler street; Butler street, from Twenty-fourth street to Twenty-eighth street; Union avenue, from Twenty-sixth street to Fifty-seventh street; Thirty-seventh street, from Wabash avenue to Dearborn street; Thirty-seventh street, from Fifth avenue to Union avenue; Forty-third street, from Princeton avenue to Halsted street; Fifty-seventh street, from Wabash avenue to South Park avenue; Wabash avenue, from Twenty-third to Sixty-third street; South Park avenue, from Twenty-second to Twenty-third street; Forty-third street, from Dearborn street to Fifth avenue; Dearborn street, from Forty-third street to Forty-fifth street; Forty-fifth street, from Princeton avenue to Ellis avenue.

GRAND CROSSING & WINDSOR PARK RAILWAY COMPANY.

For street railway on Seventy-fifth street, from the Illinois Central Railroad to Railroad avenue. Passed July 14, 1892; twenty years.

JEFFERSON STREET RAILWAY COMPANY.

For street railway on Elston avenue, Belmont avenue, Crawford avenue, Peterson avenue, Lawrence avenue, Montrose boulevard, Stewart avenue, Jefferson avenue, Irving Park boulevard, Warner avenue, Ridgeland avenue, Western avenue, and California avenue. Passed April 4, 1893; twenty years. See Chicago Electric Transit Co.



MAP

SHOWING LINES OF THE
LAKE STREET ELEVATED R.R. CO.

LAKE STREET ELEVATED RAILROAD COMPANY.

(See Map, Page 388.)

For "L" road on Lake street, from Canal street to west City limits. Exclusive grant to this company, and not transferable. Passed December 28, 1888; grant twenty-five years, and until the City may purchase.

Same: For "L" road on Lake street, from Canal street to Crawford avenue, with like terms and conditions, except that the franchise is for forty years and may be sold or assigned, or that the City may purchase the road after twenty-five years. Passed November 24, 1890.

Same: For "L" road on Lake street (west end of) from Crawford avenue to west City limits; and on Lake street and over the Lake street bridge to Market street. Passed November 24, 1890; forty years, or City may purchase the road after twenty-five years.

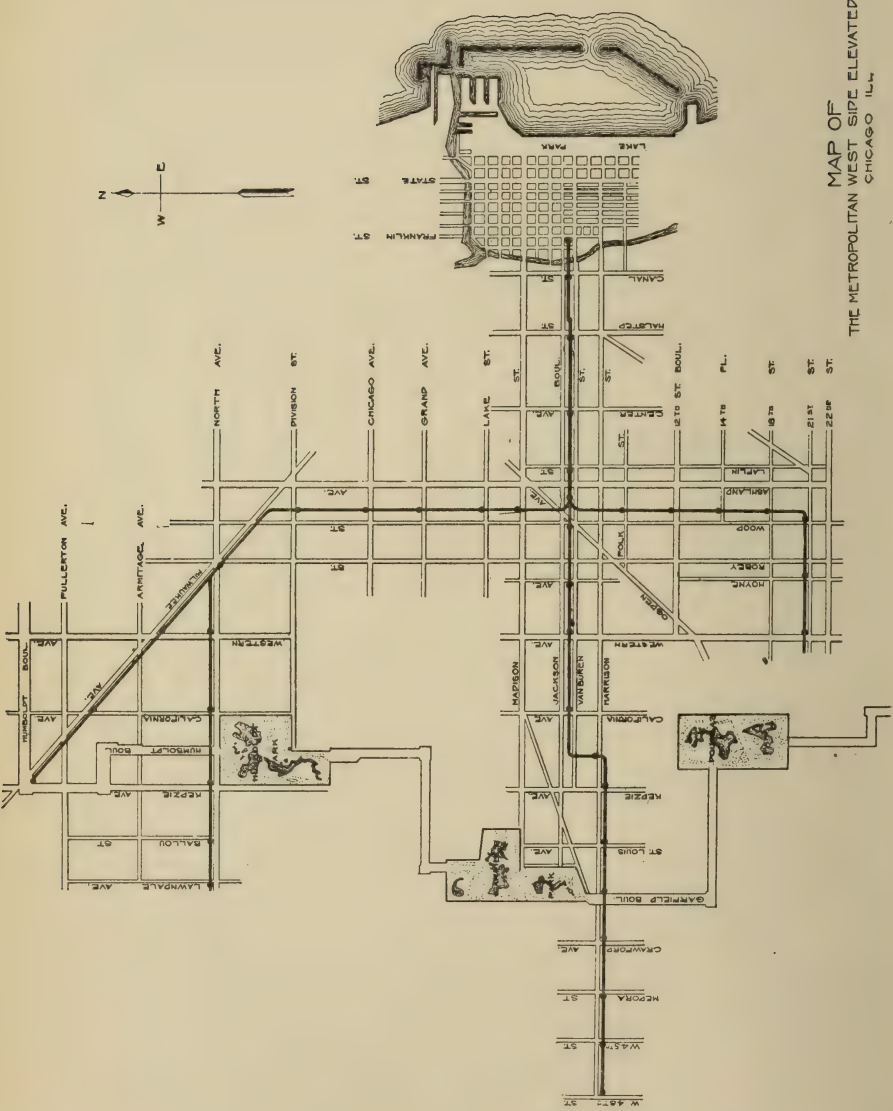
Same: Ordinance to return to the railway company \$100,000 deposit. Passed November 30, 1891.

Same: Ordinance confirming transfer of the Lake Street Elevated Railway Company to the Lake Street Elevated Railroad Company. Passed December 19, 1892.

Same: For additional lines of "L" road as follows: From the main line on Lake street at a point between La Salle street and Jefferson street north of Fullerton avenue, between Sheffield avenue and Larrabee street, and thence northerly to City limits; also a branch on Market street, from Lake street to Madison street; also a line from main line on Lake street to Canal street, east and across the viaduct and bridge to Market street; also a line commencing at the main line near Halsted street, thence southerly to the City limits; also a line commencing on the main line, Lake street, at a point between Hamlin avenue and West Forty-first street, thence south to Madison street; also a line commencing at the main line, Lake street, at a point between Rockwell street and California avenue, thence north to Diversey street and northwesterly to City limits. Passed May 15, 1893; fifty years. (See change of route of this last named line by ordinance, passed November 27, 1893.)

Same: Ordinance *in re* use of streets, change of car license fee, etc. Passed May 22, 1893.

Same: Ordinance changing the northerly and northwesterly route as named in ordinance of May 15, 1893, so that the route shall be from a point on Lake street, between Western and California avenues, north to a point between Chicago avenue and Potomac



MAP OF
THE METROPOLITAN WEST SIDE ELEVATED RAILROAD
CHICAGO ILL.

avenue, thence west to a point between Rockwell street and California avenue, thence north to near Diversey street and thence northwesterly to City limits. Passed November 27, 1893.

Same: For "L" road on East Lake street, from Market street to Wabash avenue. Passed October 1, 1894; fifty years.

METROPOLITAN CITY RAILWAY COMPANY.

(See Map, Page 390.)

Franchise for Lake street, from Michigan avenue to Canal street; Canal street, from Lake street to Fourteenth street; Fourteenth street, from Canal street to California avenue. Passed April 30, 1895; to 1900, or until sold to other parties.

METROPOLITAN WEST SIDE ELEVATED R. R. COMPANY.

Ordinance passed April 7, 1892; fifty years.

NORTH CHICAGO CITY RAILWAY COMPANY.

(See Map, Page 392.)

Corporation recognized and franchise and powers conferred upon it by an Act of Legislature. Approved February 14, 1859. (See Sec. 2939, M. C. of 1890.)

Same: By ordinance passed July 30, 1883 (as amended August 6, 1883), this company is granted twenty years extension of franchises upon all existing street railway lines. (Sec. 2902, M. C. of 1890.)

Same: Street railway on Clark street, from North Water street to Green Bay road, and thence in Green Bay road to present or future City limits.

On Division street, from Clark street to Clybourn avenue, thence in Clybourn avenue to Racine road, and thence in same direct line to northern City limits.

On Michigan street, from Canal street to Rush street, thence north on Rush street to Chicago avenue, hence on Green Bay road to Wolcott street, thence on Wolcott street to Elm street, and thence on Elm street to Clark street.

On Wells street, from North Water street to Division street, thence west on Division street to Sedgwick street, and thence north on Sedgwick street to Green Bay road.

On Chicago avenue, from Rush street west to the Chicago river. Passed May 23, 1859; twenty-five years.



Same: For railway on Wolcott street, from Michigan street to center of the Chicago river, to connect with the Chicago City railway. Passed January 18, 1864.

Same: Railway on Larrabee street, from Chicago avenue to Little Fort road, and thence on Little Fort road to present or future City limits.

On Linden street and Eugenie street, from Larrabee street to Wells street, and thence on any street that may be laid out later, to Green Bay road. Passed August 11, 1864.

Same: Railway on Center street, from Clark street to Lincoln avenue, and thence on said avenue to present or future City limits. Passed May 8, 1871.

Same: Railway on Clark street, from North Water street to the center of the river, to connect with the Chicago City railway. Passed November 20, 1871.

Same: Railway on Fifth avenue, from Randolph street north, over and across the Wells street bridge, thence north to Illinois street and east to Clark street. Passed October 26, 1874. Granted until October 1, 1894, and until the City may purchase.

Same: Railway on Division street, from Clark street to State street, thence north on State street to Michigan street. Passed March 22, 1880; twenty years.

Same: Railway on Sedgwick street, from Division street to Chicago avenue. Passed October 26, 1881; twenty years.

Same: Railway on Fullerton avenue, from Lincoln avenue to Racine avenue, and thence on Racine avenue to Webster avenue. Passed April 21, 1884; twenty years.

Same: Railway on Halsted street, from Clybourn avenue to Fullerton avenue. Passed December 9, 1885; twenty years.

Same: Railway on North Halsted street, from Clybourn avenue to centre of the North branch of the Chicago river, to connect with the Chicago West Division Railway Company's tracks. Transfers required from either of these companies, if necessary, for continuous trip from North Halsted street south, or from South Halsted street north. Passed March 1, 1886; twenty years.

Same: Railway on Market street, from Chicago avenue to Illinois street, and a single track from Illinois street to Michigan street; thence on Michigan street to Wells street; also a single track on Illinois street, from Market to Wells street. Passed March 15, 1886; twenty years.

Same : Cable power authorized by ordinance passed June 7, 1886.

Same : Must have consent of property owners for cable on Division street, between Clark and State streets, and on State street, between Division street and Kinzie street. Passed June 14, 1886.

NORTH CHICAGO STREET R. R. COMPANY.

Railway on Illinois street, between Clark and Wells streets, and on La Salle avenue, through La Salle street tunnel, and on La Salle street, from Illinois street to Jackson street. Cable permitted. The company to pay \$25,000 per year for the use of the tunnel, or in lieu construct and maintain new four-track iron bridges at Wells street, and at Clark street (as amended by ordinance passed October 5, 1888.) Passed July 19, 1886 ; twenty years.

Same : Railway on Division street, from Clybourn avenue to Milwaukee avenue. Restricted to single track only, over Division street bridges and approaches. If new bridges are built, the railway company to pay one-half of cost of construction and maintenance. Passed December 20, 1886 ; 20 years.

Same : Company granted use of Dearborn street bridge in connection with their Dearborn street line to Polk street, and to pay the cost of removing the old Wells street bridge to Dearborn street. Passed March 14, 1887.

Same : Providing for a single track only on La Salle street from Randolph street to Monroe street, and to postpone laying of tracks south of Monroe street, but confirming in the company their rights under ordinance above, for double track from Randolph street to Jackson street. Passed July 6, 1887.

Same : Railway on Monroe street, from La Salle street to Dearborn street. Single track.

On Randolph street, from La Salle street to Dearborn street. Single track.

On Dearborn street and Dearborn avenue, from Polk street to Michigan street.

On Fourth avenue, from a point 100 feet to a point 350 feet north of Polk street. Single track.

On Market street, from Illinois street to Michigan street (single track), and connecting with double track from Michigan street to Kinzie street.

On Kinzie street, from Market street to State street. Double track.

On Division street, from Clybourn avenue to Milwaukee avenue. Single track only across the bridges at the river or at the North branch canal.

On North avenue, from Clark street to Milwaukee avenue. Single track only over bridge and approaches. The company to pay after ten years from the acceptance of this ordinance, one-half of the cost of bridges at Division street and at North avenue, and to pay annually \$250 each for maintenance of above bridges. Passed March 14, 1887; twenty years.

Same: Ordinance construing the two above ordinances of March 14, 1887; *in re* the Wells street bridge removal to Dearborn street, etc. Passed March 1, 1887.

Same: Permit for cable on Clybourn avenue, from Fullerton avenue to Belmont avenue. Passed June 26, 1890.

Same: Permit to extend railway on Chicago avenue, from Larrabee street to Milwaukee avenue. Shall pay \$500 annually for Chicago avenue bridge. Passed March 16, 1891; extends to July 30, 1903.

Same: Authorizing use of any motor or motive power they may wish. Ordinance passed March 21, 1892, April 30, 1894.

Same: Railway on Southport avenue, between Clark street and Clybourn avenue. Amended May 14, 1894, striking out "U. S. Letter Carriers free." Passed May 7, 1894; twenty years.

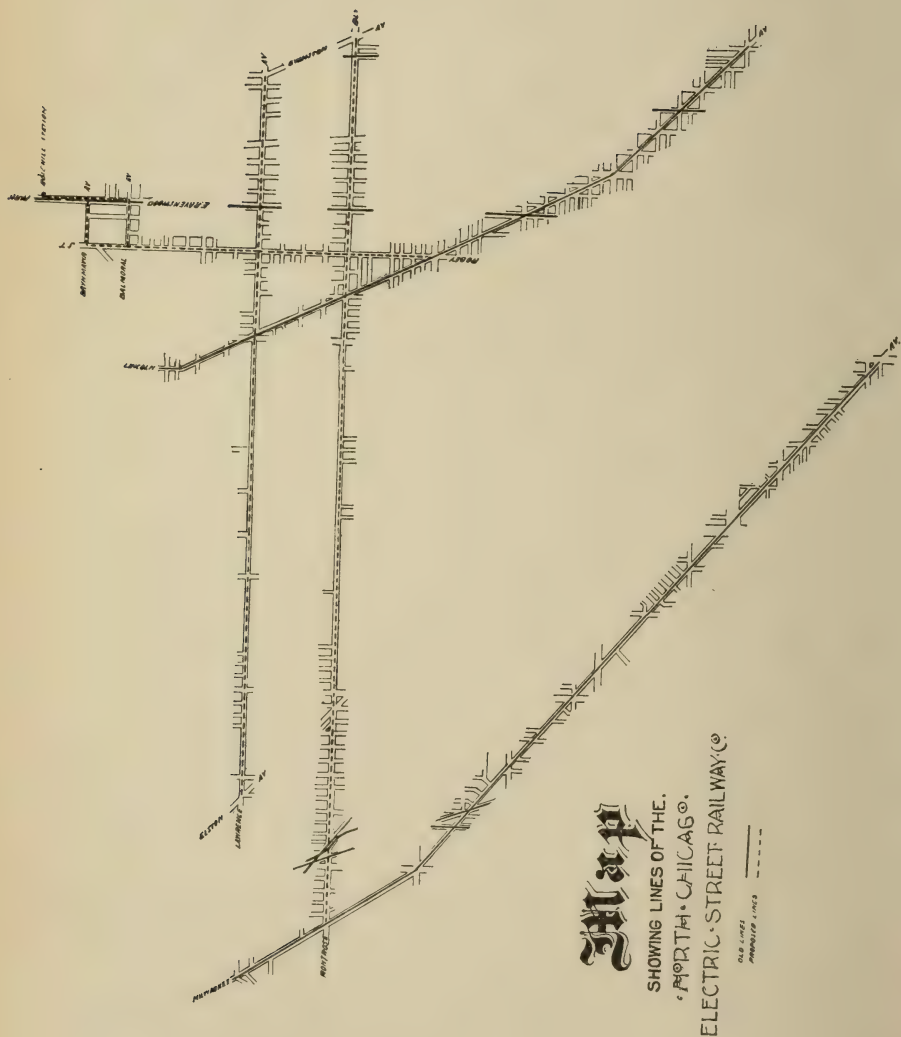
Same: Railway on Fullerton avenue, from Lincoln avenue to Milwaukee avenue. Passed May 11, 1894; twenty years.

Same: In Southport avenue, between Lincoln avenue and Clybourn place. Passed March 11, 1895; twenty years from May 21, 1894.

Same: On Indiana street, from State street across Indiana street bridge to west side of Chicago river (North branch) on Grand avenue west, thence to Halsted street. Passed February 4, 1895; twenty years.

Same: Pipe Line. Ordinance expiring when present franchise of said railway expires. For pipe two inches in diameter in Larrabee street, or in alley near thereto, thence north to Fullerton avenue, to Orchard street, to Wrightwood avenue, etc., for lighting with gas the street cars of said company. Passed October 15, 1894.

Same: A single or double track (loop) on and on part of public alley lying west of Clark street, between Clark and Orchard streets, and where same alley runs northerly from Sherman place and intersects, at its north end, another alley which runs westerly, etc. Passed February 24, 1896; twenty years.



NORTH CHICAGO ELECTRIC RAILWAY.

(See Map, Page 396.)

Street railway on Lincoln avenue, between Wrightwood avenue and North Fifty-ninth street, and on Milwaukee avenue, between Armitage avenue and Lawrence avenue. Passed November 12, 1894; twenty years.

Same: Robey street, from Lincoln avenue and Irving Park boulevard to Bryn Mawr avenue; Bryn Mawr avenue, from Robey street to East Ravenswood Park avenue; East Ravenswood Park avenue, from Bryn Mawr avenue to Rosehill station; Balmoral avenue, from Robey street to East Ravenswood Park avenue; East Ravenswood Park, from Balmoral avenue to Bryn Mawr avenue; Lawrence avenue, from Evanston avenue to Milwaukee avenue; Montrose boulevard, from Evanston avenue to Milwaukee avenue. Passed July 23, 1896, page 762; and again passed under amended ordinance July 27, 1896, page 767.

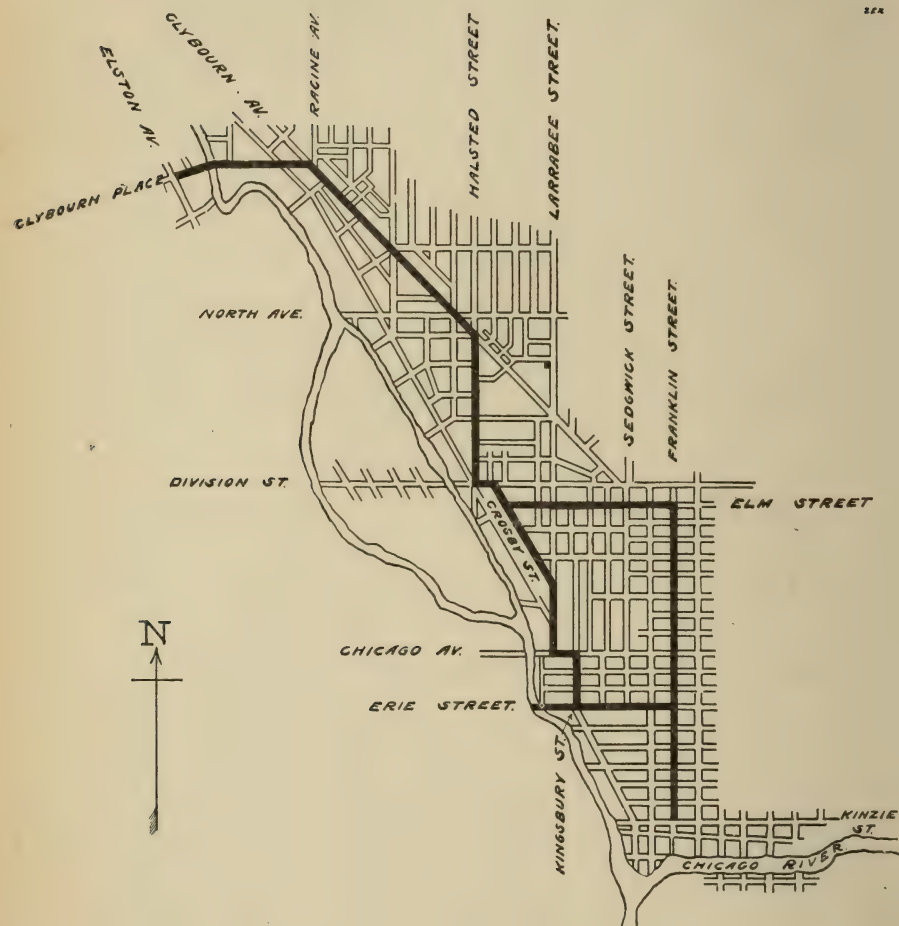
NORTHERN ELECTRIC RAILWAY.

On West Forty-seventh street, from Lake street to Thomas street; on Thomas street, from West Forty-seventh street to Forty-eighth street; on West Forty-eighth street, from Thomas street to North avenue; on Jefferson avenue, from North avenue to Armitage avenue; on North avenue, from West Forty-eighth street to Central avenue; on Central avenue, from North avenue to Grand avenue; on Leyden avenue, from Grand avenue to Belden avenue; on Belden avenue, from Leyden avenue to Poland avenue; on Poland avenue, from Grand avenue to Belden avenue. Passed July 23, 1894; twenty years.

NORTH SIDE ELECTRIC STREET RAILWAY COMPANY.

(See Map, Page 398.)

Beginning at south line of Kinzie street, at intersection of Franklin street, thence north along Franklin street to north line of Division street; also commencing at intersection of Erie street and Franklin street, thence westerly on Erie street to west line of North branch of Chicago river; also commencing at intersection of Elm and Franklin streets, thence west on Elm street to west line of Crosby street; also commencing at intersection of Kingsbury and Erie streets, thence north on Kingsbury street to intersection of Wesson



____ MAP ____
 ____ Showing Lines of the ____
NORTH SIDE ELECTRIC ST. RY. CO.

street and Chicago avenue; also commencing at intersection of Wesson street and Chicago avenue, thence north on Wesson street to 200 feet south of Oak street; also commencing at Wesson street at not less than 200 feet south of Oak street, thence west and across north and south alley lying between Wesson and Larrabee streets to east line of Larrabee; thence northwesterly along Crosby street, from the west line of Larrabee street to intersection of Grace street with Division street; also commencing at south line of Division street at intersection of Grace street, thence north on Grace street to Vedder street, thence northerly across Gardner street and east and west alleys lying between Vedder and Gardner streets, and between Gardner and Rees streets, to north line of Rees street to point 300 feet east of Halsted street; on Rees street west to Dayton street; on Dayton street to Weed street; on Weed street to Sheffield avenue; on Sheffield avenue to Mary street; on Mary street to Clybourn place; on Clybourn place easterly to Elston avenue. Passed July 16, 1894; twenty years.

Same: On Clybourn place, from Marcy street to Clybourn avenue, relinquishing all rights under ordinance of July 16, 1895. Passed October 21, 1895; 20 years.

NORTHWESTERN ELEVATED RAILROAD COMPANY.

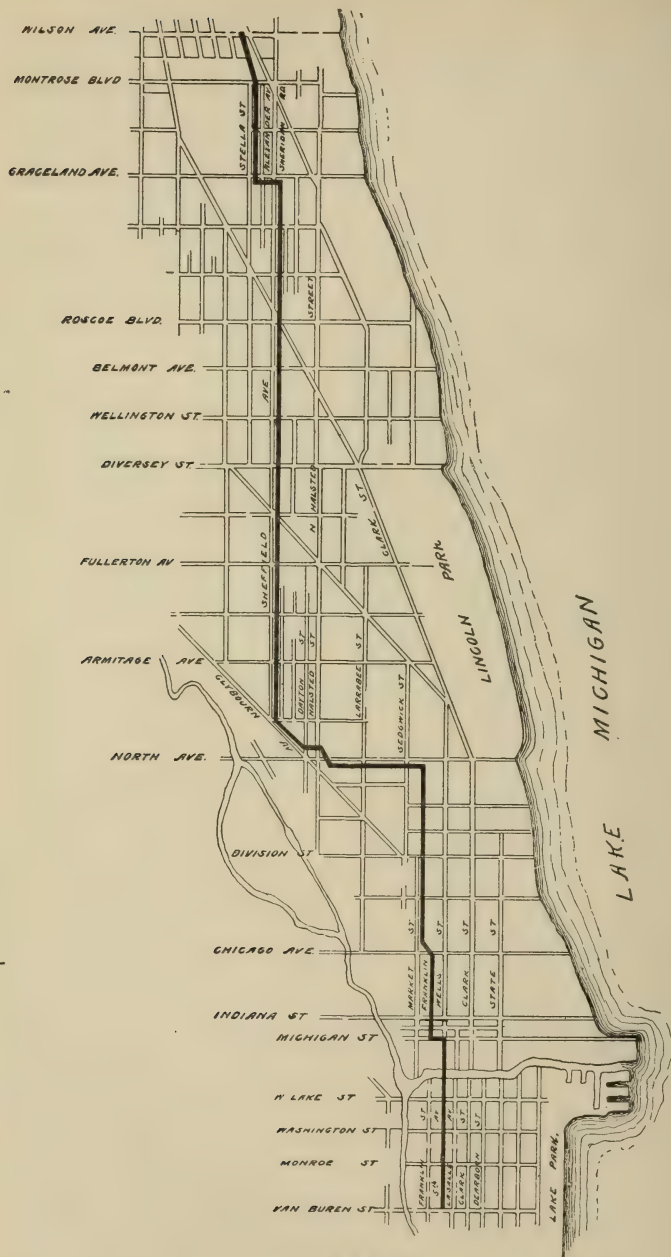
(See Map, Page 400.)

Franchise for "L" road, with acceptance of ordinance, etc. Passed January 8, 1894; 50 years.

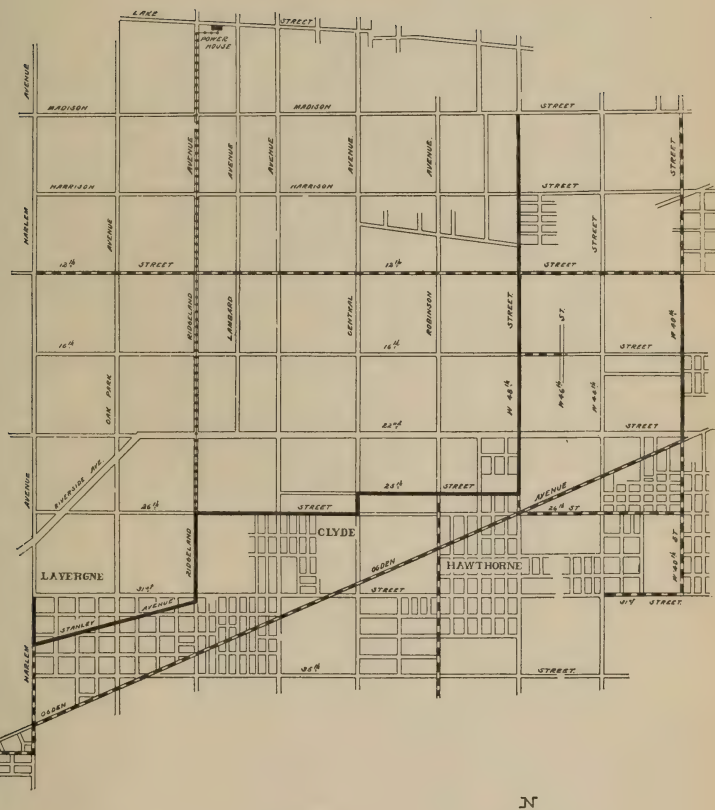
Same: (Amending ordinance of January 8, 1894.) Amending Clause 1 of Sec. 1. The route for that portion of the main line of said railroad south of north line of Institute place, shall be as follows: Beginning at a point on Institute place, between Market and North Franklin streets, thence southeast to Chicago avenue, to North Franklin street, to Michigan street; thence east to Wells street, over and across Chicago river, thence southerly on Fifth avenue to north line of Harrison street, etc. Passed June 24, 1895.

NORTHERN RAILROAD COMPANY.

For railway in Southport avenue, Jones avenue, Hawthorne avenue, Larrabee street, Robert street and Kingsbury street to Kinzie street. Passed February 5, 1866; no time limit.



MAP
SHOWING ROUTE OF
NORTHWESTERN ELEVATED R. R. CO.

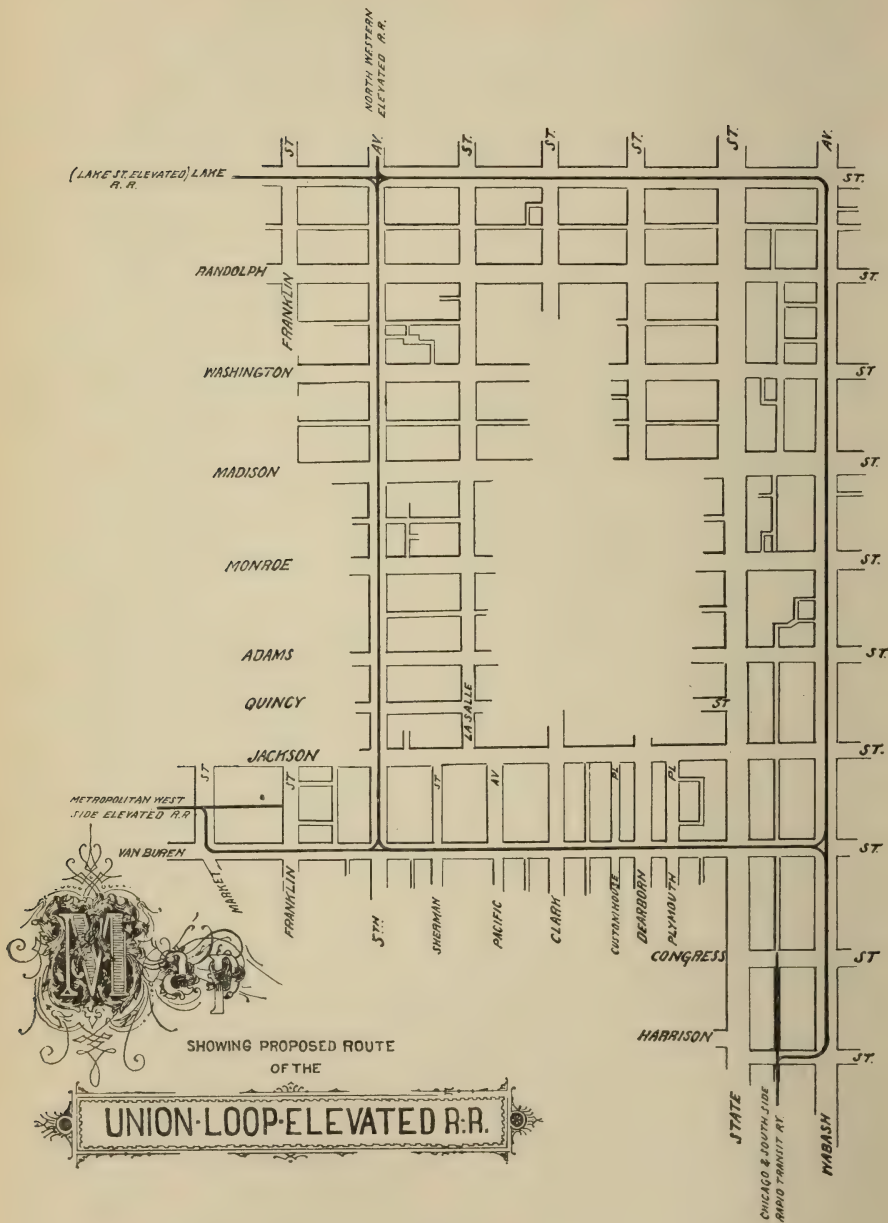


MAP
SHOWING LINES OF THE
OGDEN STREET RY. CO.

INDEX.

——— LINES COMPLETED.
- - - - - LINES TO BE BUILT.
***** FUTURE LINE.





OGDEN STREET RAILWAY COMPANY.

(See Map, Page 401.)

For street railway on West Forty-eighth street (Hyman avenue), from Madison street to Twelfth street; on West Twelfth street, from West Fortieth street (Crawford avenue) to West Forty-eighth street on Ogden avenue, from West Fortieth street to West Forty-sixth street; on West Twenty-sixth street, from West Fortieth street to West Forty-sixth street; on Thirty-first street, from West Fortieth street to West Forty-sixth street. Passed February 18, 1895; twenty years.

UNION ELEVATED R. R. Co.

(See Map, Page 402.)

For elevated railway on Wabash avenue, from Lake street to Harrison street. Passed October 14, 1895; 50 years.

UNION CONSOLIDATED ELEVATED RAILWAY COMPANY.

On Van Buren street, from Wabash avenue to a point about 200 feet east of Halsted street; also on Market street, from Van Buren street to right-of-way of the Metropolitan West Side Elevated Company. Ordinance granted for a period of 50 years from October 7, 1895. Passed June 29, 1896. P. 579.

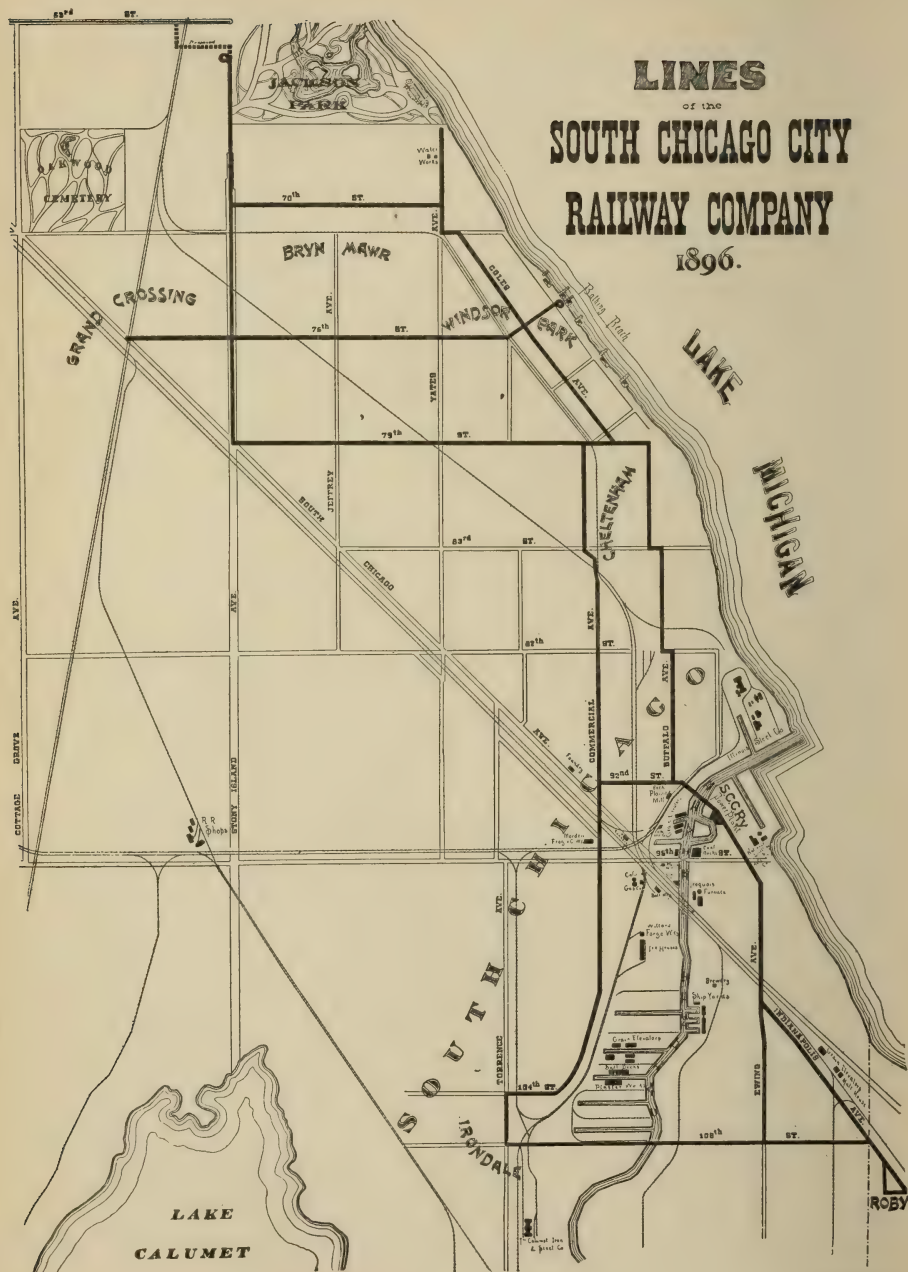
SOUTH CHICAGO CITY RAILWAY COMPANY.

(See Map, Page 404.)

For street railway on Commercial avenue, Seventy-ninth street, Cheltenham place, Buffalo avenue, Eighty-seventh street, Superior avenue, Eighty-third street, Ontario avenue, Coles avenue, Seventy-first street, Eighth avenue and One Hundred and Sixth street. Passed November 2, 1891; twenty years.

Same: On Seventieth street, Addison avenue, Seventy-first street, Seventy-fifth street, Ninety-fifth street, Indiana boulevard, Avenue K, Torrence avenue, One Hundred and Fourteenth street, Sheridan avenue, Chittenden road, South Chicago avenue and Howard avenue. Passed March 4, 1895; twenty years.

Same: On Sixty-fourth street, from Stony Island avenue to Madison avenue; Madison avenue, Sixty-fourth street to Sixty-third street. Passed June 8, 1896, page 387, and amended June 29, 1896, page 557; twenty years, dating from October 10, 1892.



SOUTHWEST CHICAGO RAPID TRANSIT COMPANY.

For street railway on Sixty-third street, from Ashland avenue to Central Park avenue. Passed July 20, 1891; twenty years. Another ordinance for same thing, passed March 20, 1893; twenty years, and re-enacted June 19, 1893.

Same: An amendatory ordinance, passed February 24, 1896, permitting overhead trolley; also permitting sale, lease or transfer of the franchise, and eliminating the requirements for carrying United States letter carriers free, etc.

WEST CHICAGO RAPID TRANSIT COMPANY.

For an elevated railroad in the West Division of the City. Passed February 17, 1890; twenty years.

WEST CHICAGO STREET RAILWAY COMPANY.

Also lessee of the Chicago West Division Railway Company.

(See Map, Page 378.)

For extensions of street railway on Fifth avenue, from Polk street to Taylor street; on Polk street, between Fifth avenue and Canal street; and on Twelfth street, from State street to the east end of the approach to the Twelfth street viaduct. Passed June 11, 1888.

Same: On West North avenue, between California avenue and Kedzie avenue, and from Kedzie avenue to the Chicago, Milwaukee & St. Paul railway right of way. Passed July 2, 1888; fifteen years.

Same: On West Chicago avenue, between Leavitt street and California avenue, and on California avenue between West Chicago avenue and Division street. Passed July 2, 1888, and May 13, 1889; fifteen years from first named date.

Same: On Milwaukee avenue, from Armitage avenue to Fullerton avenue (as an extension of the Chicago West Division railway on Milwaukee avenue). Passed February 4, 1889; fifteen years.

Same: On West Twelfth street, from Ogden avenue to Western avenue, as an extension of the Chicago West Division railway on Twelfth street east of Ogden avenue, under ordinance of August 26, 1878. Passed May 27, 1889; to August 26, 1898.

Same: Required to pave between tracks the Twelfth street line, from Ashland avenue to Ogden avenue, and the Ogden avenue line, from Twelfth street to California avenue. Passed July 25, 1889.

Same: Taylor street, between Fifth avenue and Western avenue. The Company to relinquish all claims to the Adams street bridge, and to pay to the City \$100,000 towards the construction of piers, abutments, etc., at Taylor street, and removal of the present Adams street bridge to Taylor street, such portion of the \$100,000, if any, remaining unexpended for the above, to be returned to the street railway company (as per Ordinance of January 20, 1890). Passed December 23, 1889; twenty years.

Same: On Armitage avenue, between California avenue and Kedzie avenue (or Simons avenue). Passed January 20, 1890; twenty years.

Same: On Western avenue, between Lake street and Milwaukee avenue, and between Twelfth street and Twenty-sixth street. Passed April 3, 1890; twenty years.

Same: On Lawndale avenue, between Ogden avenue and Thirty-third street. Passed November 17, 1890; twenty years.

Same: On West North avenue, between California avenue and Crawford avenue (West Fortieth street); to pay annual mileage charge of \$800 per mile from and after the first Tuesday of December, 1893, in addition to the \$50 car license fee. Passed April 9, 1891; twenty years.

Same: A later ordinance passed for the above, September 28, 1891, and expiring July 30, 1911, omitting the \$800 mileage charge.

Same: On Lake street, from Crawford avenue to West Forty-eighth street. Passed December 28, 1891; twenty years. Ordinance passed January 11, 1892, eliminating "letter carriers free."

Same: On Milwaukee avenue, from Armitage avenue to Lawrence avenue. Passed February 29, 1892; twenty years.

Same: On Ashland avenue, between Blue Island avenue and Twelfth street, and between Lake street and Erie street; on Paulina street, between Twelfth street and Lake street (the Company to pay cost of setting curbs four feet back on each side between Madison and Polk streets); on Robey street, between Blue Island avenue and Milwaukee avenue; on Western avenue, between Twelfth street and Twenty-sixth street, and between Harrison street and Van Buren street, and between Lake street and Milwaukee avenue; on Milwaukee avenue, between Armitage avenue and Lawrence avenue; on Kedzie avenue, between Madison street and Twelfth street; on Colorado avenue, between Madison and West Forty-eighth street; on West Chicago avenue, between California avenue and Grand avenue; on

Grand avenue, between Chicago avenue and Crawford avenue, and between Indiana street and Chicago avenue; on Eighteenth street, between State street and Halsted street; on Fourteenth street, between Canal street and Robey street; on State street, between Madison and Washington streets; on Dearborn street, between Adams and Van Buren streets; repeals part of section 1 of an ordinance of March 14, 1887, requiring them to grant use of Dearborn street tracks to the Chicago City Railway Company. Passed March 14, 1892; twenty years. Another ordinance passed March 21, 1892, for twenty years, covering all the above streets, permitting a single track on Robey street, or a double track, if they pay for setting the curb back four feet, etc., prohibiting more than two tracks on Dearborn street; also an agreement supplemental to the above ordinance by the Company, where, on any of the above streets of a thirty-foot improved roadway, they lay two tracks, they will set back the curbs four feet on each side and pay for all improvements of the added space, etc.

Same: On Crawford avenue (West Fortieth street), from North avenue to Grand avenue. Passed July 21, 1892; twenty years.

Same: On Armitage avenue, from California avenue to Kimball avenue. Passed September 12, 1892; twenty years. Another ordinance for above passed May 14, 1894; twenty years.

Same: (Together with the North Chicago Street Railroad Company.) By ordinance passed March 21, 1892, permitting use of "Belgian compressed air, gas, electricity or any other motive power they shall see fit to adopt" on their several respective lines of railroads owned or leased by them, providing that the electric power shall be placed underground. Above ordinance amended April 30, 1894, by striking out the "Belgian pattern" and "gas," and permitting "overhead trolley," in lieu of the underground requirement. In consideration of the above, the railway companies to pay the City \$10,000 at expiration of the first year, \$15,000 the second year, \$20,000 the third year, and \$25,000 yearly thereafter. Such sums to be used for extending the electric light system; the North Chicago Street Railroad Company further agreeing to pay the City the amount of certain judgments for damages against the City arising out of the Dearborn street bridge and viaduct, etc. Above ordinance amended May 7, 1894 (two ordinances), *in re* City police and firemen, and striking out the prohibition against trolley wires under elevated railroads.

Same : On Harrison street, between Western avenue and Kedzie avenue ; on Twenty-sixth street, between Blue Island avenue and Crawford avenue ; on Wood street, between Blue Island avenue and Milwaukee avenue ; on Lincoln street to Western avenue ; on Laurel street, between Thirty-first street and Thirty-ninth street, from Laurel to Main street ; on Main street, northeasterly from Thirty-fifth street to (over the bridge) Throop street ; on Throop street, between Twenty-first street and Taylor street ; on private property, from the south end of Throop street to a connection at Twenty-first street and Main street ; on Sangamon street, between Austin avenue and Erie street ; on Erie street, from Sangamon street to the east bank of the North branch of the Chicago river ; on Twenty-first street, between Western avenue and Douglas boulevard, and between Center avenue and Halsted street. Passed February 4, 1895 ; twenty years.

Same : On West Chicago avenue, between Grand avenue and Kedzie avenue. Passed May 6, 1895 ; twenty years.

Same : On Western avenue, from Milwaukee avenue to Belmont avenue. Passed October 21, 1895 ; twenty years.

Same : Ashland avenue, from Blue Island avenue to Thirty-first street ; California avenue, from Ogden avenue to Kinzie street ; California avenue, from Division street to North avenue ; California avenue, from Armitage avenue to Belmont avenue ; Kedzie avenue from Madison street to Chicago avenue ; Kedzie avenue, from Ogden avenue to Twelfth street ; Armitage avenue, from Elston avenue to Milwaukee avenue ; Augusta street, from Elston avenue to North Fortieth avenue ; Roby street, from North avenue to Elston avenue. Original ordinance passed July 20, 1896, page 737, and vetoed by the Mayor July 27, page 791, and passed as amended July 27, 1896, page 792 ; twenty years.

Same : Armitage avenue, from North Forty-fourth avenue to Grand avenue ; Grand avenue, from Armitage avenue to Central avenue. Ordinance passed November 9, 1896 ; page 1080.

NORTH CHICAGO STREET RAILWAY COMPANY AND WEST CHICAGO STREET RAILWAY COMPANY.

Ordinance for operating their respective railway lines with electricity as a motive power, in and along each and all of the streets and avenues in the South division of the City of Chicago. Passed July 20, 1896, page 742 ; vetoed by the Mayor, July 27, 1896, page 795 ; and again passed under amended ordinance July 27, 1896, page 796.

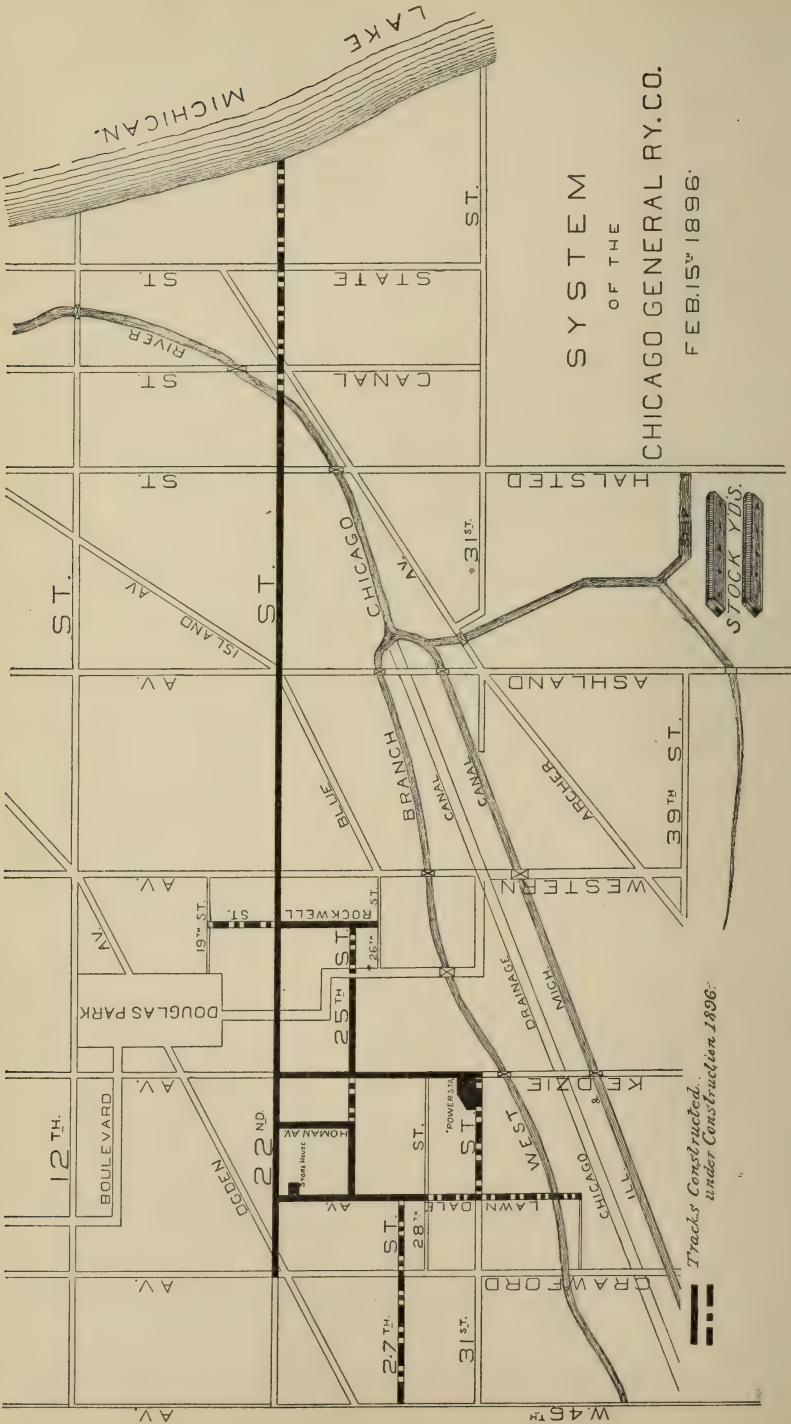
WEST AND SOUTH TOWN HORSE RAILWAY COMPANY, WEST AND
SOUTH TOWN STREET RAILWAY COMPANY, CHICAGO
GENERAL RAILWAY COMPANY.

(See Map, Page 410.)

Street railway on Twenty-second street, from Grove street to Johnson street, and from May street to Crawford avenue, and for a connecting line over private property between Johnson street and May street; also on Lawndale avenue, from Twenty-second street to Thirty-fifth street. To pay in addition to a \$50 car license, \$500 annually per mile after December 1, 1895. Passed February 8, 1892; twenty years.

Same: (West and South Towns Street Railway Company.) On Twenty-fifth street, from Lawndale avenue to Rockwell street; on Kedzie avenue, from Twenty-second street to Thirty-first street; on Homan avenue, from Twenty-second street to Twenty-third street; \$500 mileage not required under this ordinance. Passed April 5, 1893; to February 8, 1912.

Same: (Chicago General Railway Company.) On Homan avenue, from Twenty-third to Twenty-fifth streets. Passed December 10, 1894; to February 8, 1912.



Tracks Constructed under Construction 1896

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INDEX TO STREETS OCCUPIED BY STREET CAR LINES.

| | | |
|------------------|----------------------------------|-----------------------|
| Adams st..... | Center to Michigan ave..... | W. Chi. St. Ry. Co. |
| Addison ave..... | Western ave. to N. 64th st..... | Chi. Elec. Trans. Co. |
| Armitage ave.... | Elston ave. to N. 44th st..... | W. Chi. St. Ry. Co. |
| Archer ave..... | State to S. 44th st..... | Chi. City Ry. Co. |
| Ashland ave..... | Graceland to Belmont ave..... | N. Chi. St. Ry. Co. |
| Ashland ave..... | Clybourn pl. to Lake st..... | W. Chi. St. Ry. Co. |
| Ashland ave..... | 12th to 31st st..... | W. Chi. St. Ry. Co. |
| Ashland ave..... | 31st to 69th st..... | Chi. City Ry. Co. |
| Augusta st..... | Elston to N. 40th ave..... | W. Chi. St. Ry. Co. |
| Austin ave..... | Desplaines st. to Center ave.... | W. Chi. St. Ry. Co. |
| Avenue F..... | 103d to 108th st..... | Calumet Elec. St. Ry. |
| Avenue K..... | Ewing ave. to 108th st..... | S. Chi. City Ry. Co. |
| Avenue L..... | 98th to 108th st..... | Calumet Elec. St. Ry. |
| Avenue N..... | 95th to 98th st..... | Calumet Elec. St. Ry. |

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| Balmoral ave..... | Robey st. to E. Ravenswood Pk.... | N. Chi. Elec. St. Ry. |
| Baltimore ave..... | 83d st. to Erie ave..... | Calumet Elec. St. Ry. |
| Belmont ave..... | Ashland av. to Robey st..... | N. Chi. St. Ry. Co. |
| Belmont ave..... | Halsted st. to Milwaukee ave.... | Chi. Elec. Trans. Co. |
| Blackhawk st..... | Noble to Holt st..... | W. Chi. St. Ry. Co. |
| Blue Island ave.... | Halsted st. to Western ave..... | W. Chi. St. Ry. Co. |
| Bond ave..... | 83d st. to Cheltenham pl. | Calumet Elec. St. Ry. |
| Bryn Mawr ave.... | Robey st. to E. Ravenswood Pk... | N. Chi. Elec. St. Ry. |
| Buffalo ave..... | 87th to 92d st..... | S. Chi. City Ry. Co. |
| Butler st..... | 24th to 28th st..... | General Elec. Ry. |

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| Canal st..... | 18th to Harrison st..... | W. Chi. St. Ry. Co. |
| Canal st..... | 22d to 23d st..... | Gen. Elec. St. Ry. Co. |
| Canal st..... | Archer ave. to 29th st..... | Chi. City Ry. Co. |
| Canalport ave..... | Halsted to 18th st..... | W. Chi. St. Ry. Co. |
| California ave..... | Belmont to Chicago ave..... | W. Chi. St. Ry. Co. |
| California ave..... | Kinzie st. to Ogden ave..... | W. Chi. St. Ry. Co. |
| Calumet ave..... | 67th to 69th st..... | Englewood & C. E. St. |
| Center st..... | Clark st. to Racine ave..... | N. Chi. St. Ry. Co. |
| Center ave..... | 21st to Adams st..... | W. Chi. St. Ry. Co. |
| Center ave..... | Erie st. to Austin ave..... | W. Chi. St. Ry. Co. |
| Center ave..... | 31st to 35th st..... | Chi. City Ry. Co. |
| Center ave..... | 47th to 63d st.... | Chi. City Ry. Co. |
| Cheltenham pl..... | Bond to Lake ave..... | Cal. Elec. St. Ry. |
| Chicago ave..... | Clark st. to Milwaukee ave..... | N. Chi. St. Ry. Co. |
| Chicago ave..... | Milwaukee ave. to N. 40th st. | W. Chi. St. Ry. Co. |
| Chicago ave..... | Crosby to Erie st..... | N. S. Elec. St. Ry. Co. |
| Chicago ave..... | N. 40th to Kedzie ave..... | C. & J. U. Trans. Co. |
| Chicago ave..... | N. 48th to N. 52d ave..... | Cic. & Pro. St. Ry. |

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| Clemens ave..... | 71st to 72d st..... | E. & Chi. Elec. St. Ry. |
| Clark st..... | Washington to 22d st..... | Chi. City St. Ry. Co. |
| Clark st..... | Washington to Devon st..... | N. Chi. St. Ry. Co. |
| Clinton st..... | Harrison st. to Milwaukee ave..... | W. Chi. St. Ry. Co. |
| Clybourn ave..... | Clybourn pl. to Halsted st..... | N. S. Elec. St. Ry. Co. |
| Clybourn ave..... | Division st. to Western ave..... | N. Chi. St. R. R. Co. |
| Clybourn pl..... | Robey st. to Elston ave..... | N. Chi. St. R. R. Co. |
| Clybourn pl..... | Elston to Clybourn ave..... | N. S. Elec. St. Ry. Co. |
| Colorado ave..... | Madison st. to W. 40th ave..... | W. Chi. St. R. R. Co. |
| Coles ave..... | 71st to 79th st..... | S. Chi. St. R. R. Co. |
| Commercial ave.... | 79th to 104th st..... | S. Chi. St. R. R. Co. |
| Cottage Grove ave.. | 22d to S. Chicago ave..... | Chi. City St. Ry. Co. |
| Crawford ave..... | Chicago to Grand ave..... | Chi. & J. U. Trans. Co. |
| Crosby ave..... | Division to Larrabee st..... | N. S. Elec. St. Ry. Co. |
| Custom House pl... | Jackson to 14th st..... | General Electric. |
| Dearborn st..... | 43d to 45th st..... | General Electric. |
| Dearborn ave and st. | Kinzie to Polk st..... | N. Chi. St. Ry. Co. |
| Dearborn st..... | Van Buren to Adams st..... | N. Chi. St. Ry. Co. |
| Dearborn st..... | 20th to 21st st..... | Chicago City Ry. |
| Dearborn st..... | 14th to 37th st..... | General Electric. |
| Devon ave..... | Evanston ave. to Clark st..... | Chi. N. S. St. Ry. Co. |
| Desplaines st..... | Harrison to Adams st..... | W. Chi. St. Ry. Co. |
| Desplaines st..... | Madison st. to Austin ave..... | W. Chi. St. Ry. Co. |
| Division st..... | Milwaukee to California ave..... | W. Chi. St. Ry. Co. |
| Division st..... | Halsted to Crosby st..... | N. S. Elec. St. Ry. Co. |
| Division st..... | State st. to Milwaukee ave..... | N. Chi. St. Ry. Co. |
| 83d st..... | S. Chicago to Bond ave..... | Calumet Electric. |
| 83d st..... | Ontario to Superior st..... | S. Chi. City Ry. Co. |
| 18th st..... | Leavitt to River st..... | W. Chi. St. Ry. Co. |
| 18th st..... | Indiana to Wabash ave..... | W. Chi. St. Ry. Co. |
| 86th st..... | Sangamon to Loomis st..... | Eng. & Chi. Elec. St. Ry. |
| 86th pl..... | | |
| 87th st..... | Cottage Grove ave. to Vincennes rd. | Eng. & Chi. Elec. St. Ry. |
| 87th st..... | Superior ave. to Buffalo st..... | S. Chi. City Ry. Co. |
| 87th st..... | Stony Island to Cottage Grove ave.. | Calumet Electric. |
| 89th st..... | The Strand to Mackinaw ave..... | Calumet Electric. |
| Elston ave..... | Milwaukee to Chi. ave. City limits.. | Chi. Elec. Trans. Co. |
| Elm st..... | Crosby to Franklin st..... | N. S. Elec. St. Ry. Co. |
| Erie ave..... | Baltimore to S. Chi. ave..... | Calumet Electric. |
| Erie st..... | Center to Ashland ave..... | W. Chi. St. Ry. Co. |
| Erie st..... | River to Franklin st..... | N. S. Elec. St. Ry. Co. |
| Escanaba ave..... | 78th to 83d st..... | Calumet Electric. |
| Evans ave..... | 71st to 72d st..... | Eng. & Chi. Elec. St. Ry. |
| Evanston ave..... | Clark st. to Graceland ave..... | N. Chi. St. Ry. |
| Evanston ave..... | Graceland & Halsted to Devon ave. | C. N. Shore St. Ry. |
| Ewing ave..... | 92d to..... | S. Chi. City Ry. |

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| Fifth ave..... | Twelfth to Randolph st..... | W. Chi. St. Ry. Co. |
| Fifth ave..... | Lake to Van Buren st | Union Loop. |
| Fifth ave..... | 37th to 43d st..... | General Electric. |
| 51st st. | Grand blvd. to Western ave..... | Chi. City Ry. Co. |
| 55th st..... | Cottage Grove to Lake ave..... | Chi. City Ry. Co. |
| 56th st..... | Morgan st. to Western ave..... | General Electric. |
| 57th st..... | Wabash ave. to Morgan st..... | General Electric. |
| 57th st..... | Wabash to S. Park ave | General Electric. |
| 59th st..... | State st. to Western ave | Chi. City Ry. Co. |
| 14th st..... | Canal to Robey st..... | W. Chi. St. Ry. Co. |
| 14th st..... | Plymouth to Custom House pl | General Electric. |
| S. 40th ave | Madison to 31st st..... | Ogden St. Ry. Co. |
| 40th st..... | Alley E. of State to alley E. of Prairie | C. & S. S. Rapid T. Co. |
| N. 40th ave..... | Irving Pk. blvd. to Peterson ave... | Chi. Elec. Trans. Co. |
| 43d st..... | State st. to the Lake..... | Chi. City Ry. Co. |
| 43d st..... | Fifth to Princeton ave..... | General Electric. |
| 45th st..... | Princeton to Ellis ave | General Electric. |
| 46th ct..... | Montrose to..... | Chi. Elec. Trans. Co. |
| 47th st..... | The Lake to Archer ave | Chi. City Ry. Co. |
| S. 48th ave | Madison to 26th st | Ogden St. Ry. Co. |
| 48th ave..... | Warren ave..... | Chi. Elec. Trans. Co. |
| 48th ave..... | Madison st. to Chicago ave..... | Cicero & Proviso St. Ry. |
| Franklin st..... | Elm to Kinzie st..... | N. W. Elec. St. Ry. Co. |
| Front st..... | 95th to 99th st..... | Eng. & Chi. Elec. St. Ry. |
| Fulton st..... | Morgan st. to Kedzie ave | Chi. & Jeff. U. T. Co. |
| Fullerton ave | Halsted st to Milwaukee ave. | N. Chi. St. Ry. Co. |

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| Garfield ave..... | Lincoln to Racine ave | N. Chi. St. Ry. |
| Graceland ave..... | Ashland ave. to River | Chi. Elec. Trans. Co. |
| Graceland ave..... | Evanston to Ashland ave..... | N. Chi. St. Ry. Co. |
| Grand ave..... | Western ave. to Halsted st..... | N. Chi. St. Ry. Co. |
| Grand ave..... | 40th st. to Western ave | N. Chi. St. Ry. Co. |
| Grand ave..... | Crawford to Armitage ave..... | Chi. & Jeff. U. T. Co. |

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| Halsted st..... | Archer ave. and River to 79th st .. | Chi. City Ry. Co. |
| Halsted st..... | Clybourn ave. to Division st | N. S. Elec. St. Ry. Co. |
| Halsted st..... | N. Branch to S. Branch..... | W. Chi. St. Ry. Co. |
| Halsted st..... | N. Branch to Graceland ave | N. Chi. St. Ry. Co. |
| Halsted st..... | 119th to 121st st..... | Calumet Elec. St. Ry. |
| Harbor ave..... | 93d to Makinaw ave..... | Calumet Elec. St. Ry. |
| Harrison st..... | Kedzie to Wabash ave | W. Chi. St. Ry. Co. |
| Holt st | Blackhawk to North ave..... | W. Chi. St. Ry. Co. |
| Homan ave..... | 22d to 25th | Chi. Genl. Ry. Co. |
| Honore st | 75th to 76th sts..... | Calumet Elec. St. Ry. |

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| Indiana ave | 18th to 51st st..... | Chi. City St. Ry. Co. |
| Indiana st..... | Halsted st. to Grand ave..... | W. Chi. St. Ry. Co. |
| Indiana st..... | Milwaukee ave and Halsted to State N. | Chi. St. Ry. Co. |
| Indianapolis ave ... | K to State line..... | S. Chi. City Ry. Co. |
| Irving Park blvd... | River to City Limits..... | Chi. Elec. Trans. Co. |
| Jefferson ave..... | | |
| Jefferson ave..... | 62d to 63d st | Chi. City Ry. Co. |
| Kedzie ave | Fulton st. to North ave | Chi. & Jeff. U. T. Co. |
| Kedzie ave | 38th to 63d st | Chicago City Ry. Co. |
| Kedzie ave | 22d to 31st st..... | Chi. Genl. Ry. Co. |
| Kedzie ave | Ogden to Chicago ave | N. Chi. St. Ry. Co. |
| Kedzie ave | Division st. to North ave..... | N. Chi. St. Ry. Co. |
| Kingsbury st..... | Chicago ave. to Erie st | N. S. Elec. St. Ry. Co. |
| Kinzie st | Market or Orleans st. to Wells st... | N. Chi. St. Ry. Co. |
| Kimball ave..... | North to Armitage ave | N. Chi. St. Ry. Co. |
| Lake ave | 78th st. to Cheltenham pl | Calumet Elec. |
| Lake ave..... | 56th st. to alley S. of 55th st..... | Chi. City Ry. |
| Lake st..... | N. 48th ave. to | W. Chi. St. Ry. Co. |
| Lake st..... | Wabash ave. to 52d st..... | Lake St. Ele. Ry. Co. |
| Lake st..... | Wabash ave. to State st..... | Chi. City Ry. Co. |
| Lake st..... | 48th to 52d ave | Cicero & Proviso St. Ry. |
| Lake st..... | 5th to Wabash ave..... | Union Loop. |
| Lake st..... | 5th to 52d ave..... | Lake St. Elevated. |
| La Salle st | Michigan ave. to Monroe st..... | N. Chi. St. Ry. Co. |
| La Salle st | Madison to Michigan st..... | N. Chi. St. Ry. Co. |
| Larrabee st | Chi. to Clybourn ave | N. Chi. St. Ry. Co. |
| Larrabee st | Crosby st. to Chicago ave..... | N. S. Elec. St. Ry. Co. |
| Lawndale ave | Ogden ave. to 33d st..... | W. Chi. St. Ry. Co. |
| Lawndale ave | 22d st. to S. of River..... | Chi. Genl. Ry. Co. |
| Lawrence ave | Elston to Evanston ave..... | N. C. Elec. St. Ry. Co. |
| Lawrence ave | Elston to Milwaukee ave | Chi. Elec. Trans. Co. |
| Leavitt st | 18th st. to Blue Island ave | W. Chi. St. Ry. Co. |
| Lincoln ave | Belmont to Center ave..... | W. Chi. St. Ry. Co. |
| Lincoln ave | | |
| Loomis st | 86th to 95th st | Eng. & Chi. Elec. St. Ry. |
| Madison st..... | State st. to Michigan ave..... | Chi. City Ry. |
| Madison st..... | State st. to 40th ave..... | W. Chi. St. Ry. Co. |
| Madison st..... | 40th to 52d ave..... | Cicero & Prov. St. Ry. |
| Madison ave..... | 63d to 64th st..... | S. Chi. City Ry. Co. |
| Madison ave..... | 63d to 64th st..... | Chi. City Ry. Co. |
| Mackinaw ave..... | Harbor ave. to 89th st | Calumet Electric. |
| Market st. (Orleans) | Kinzie to Division st..... | N. Chi. St. Ry. Co. |
| Market st. (Orleans) | Lake to Madison st..... | Lake St. Elevated. |
| Michigan ave..... | Adams to Washington st..... | W. Chi. St. Ry. Co. |
| Michigan ave..... | Madison to Randolph st..... | Chi. City Ry. Co. |
| Michigan ave..... | 95th to 124th st..... | Calumet Electric. |

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| Michigan st..... | Market (Orleans) to Clark st..... | N. Chi. St. Ry. Co. |
| Milwaukee ave..... | Lake st. to Logan sq..... | N. Chi. St. Ry. Co. |
| Milwaukee ave..... | | |
| Milwaukee ave..... | Lawrence to City limits | Chi. Elec. Trans. Co. |
| Monroe st..... | La Salle to Dearborn st..... | N. Chi. St. Ry. |
| Monroe st..... | Morgan to Canal st..... | Chi. & Jeff. U. T. Co. |
| Montrose blvd..... | Milwaukee to Evanston ave..... | N. Chi. Elec. St. Ry. |
| Morgan st..... | 57th to 56th st..... | General Electric Ry. |
| Morgan st..... | Monroe to Fulton st..... | Chi. & Jeff. U. T. Co. |

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| 91st st..... | S. Chicago ave. to Mackinaw ave.. | Calumet Electric. |
| 91st st..... | Stony Island to Cottage Grove ave. | Calumet Electric. |
| 92d st | Commercial to Ewing ave..... | S. Chi. City Ry. Co. |
| 93d st | S. Chicago to Stony Island ave.... | Calumet Electric. |
| 93d st | S. Chicago to Harbor ave..... | Calumet Electric. |
| 93d st | Washington to Cottage Grove ave.. | Calumet Electric. |
| 94th st | Stony Island to Washington ave... | Calumet Electric. |
| 95th st | S. Chicago to Avenue N. | Calumet Electric. |
| 95th st | Cottage Grove to Michigan ave.... | Calumet Electric. |
| 95th st | Loomis to Front st..... | Eng. & Chicago. |
| 98th st | Avenue N to Avenue L | Calumet Electric. |
| 99th st | Front to Winston st..... | Eng. & Chicago. |
| Noble ave..... | Blackhawk st. to Milwaukee ave .. | W. Chi. St. Ry. Co. |
| North ave..... | Milwaukee to 40th ave | W. Chi. St. Ry. Co. |
| North ave..... | Ashland to Holt ave..... | W. Chi. St. Ry. Co. |
| North ave..... | Milwaukee ave. to Clark st..... | N. Chi. St. Ry. Co. |

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| Ogden ave | S. 40th to S. 48th ave..... | Ogden St. Ry. Co. |
| Ogden ave | Randolph to S. 40th st..... | W. Chi. St. Ry. Co. |
| 103d st | Michigan ave. to Vincennes rd.... | Calumet Electric. |
| 103d st | Avenue L to Avenue F | Calumet Electric. |
| 103d st | Michigan ave. to Wood st..... | Eng. & Chi. Elec. St. |
| 104th st | Torrence to Commercial ave..... | S. Chi. City Ry. Co. |
| 108th st | Torrence to Indianapolis ave..... | S. Chi. City Ry. Co. |
| 108th st | Avenue L to Indiana State line.... | Calumet Electric. |
| 111th st | Indiana to Ashland ave..... | Eng. & Chi. Elec. |
| 115th st | Michigan to Prairie ave..... | Calumet Elec. St. Ry. |
| 116th st | Wentworth to Prairie ave..... | Calumet Elec. St. Ry. |
| 119th st | Michigan ave. to Halsted st..... | Calumet Elec. St. Ry. |
| 119th st | Halsted st. to Ashland ave..... | Eng. & Chi. Elec. |
| Ontario ave | 79th to 83d st..... | S. Chi. City Ry. Co. |
| Orleans st. (Market) | Kinzie to Division st..... | N. Chi. St. Ry. Co. |

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| Paulina st..... | Lake to 12th st..... | W. Chi. St. Ry. Co. |
| Peterson ave..... | Kedzie to N. 40th ave..... | Chi. Elec. Trans. Co. |
| Pitney ct..... | 31st st. to Archer ave..... | Chi. City Ry. Co. |
| Plymouth pl. | Jackson to 14th st..... | General Elec. Ry. Co. |
| Polk st..... | Canal st. to 5th ave..... | W. Chi. St. Ry. Co. |

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| Prairie ave..... | 115th to 116th st..... | Calumet Elec. St. Ry. |
| Princeton ave..... | 23d to 24th st..... | General Electric. |
| Princeton ave..... | 43d to 57th st..... | General Electric. |
| Randolph st..... | Wabash ave. to State st..... | Chi. City Ry. Co. |
| Randolph st..... | Lake to State st..... | W. Chi. St. Ry. Co. |
| Randolph st..... | La Salle to Dearborn st..... | N. Chi. St. Ry. Co. |
| E. Ravenswood prk. | Balmoral to Rosehill station..... | N. Chi. Elec. St. Ry. |
| East Racine ave.... | Center st. to Fullerton ave..... | N. Chi. St. Ry. |
| Railroad ave..... | 73d to 78th st..... | Calumet Electric. |
| Rhodes ave..... | 35th to 39th st..... | Chi. City Ry. |
| Robey st..... | Lincoln to Bryn Mawr ave..... | N. Chi. Elec. St. Ry. |
| Robey st..... | Elston to Blue Island ave..... | W. Chi. St. Ry. Co. |
| Robey st..... | Belmont ave. to Roscoe st..... | N. Chi. St. Ry. |
| Rockwell st..... | 19th to 26th st..... | Chi. Genl. Ry. Co. |
| Root st..... | State to Halsted st..... | Chi. City Ry. Co. |
| Roscoe st..... | Robey st. to Western ave..... | N. Chi. St. Ry. |
| Sangamon st..... | Erie to Adams st..... | W. Chi. St. Ry. Co. |
| Sangamon st..... | 68th to 95th st..... | Eng. and Chi. Elec. |
| 70th st..... | Stony Island to Yates ave..... | S. Chi. City Ry. |
| 71st st..... | Yates to Coles ave..... | S. Chi. City Ry. |
| 71st st..... | State st. to Cottage Grove ave.... | Calumet Elec. |
| 72d st..... | Cottage Grove to Evans ave..... | Calumet Elec. |
| 73d st..... | Stony Island to Railroad ave..... | Calumet Elec. |
| 75th st..... | Stony Island ave. to Honore st.... | Calumet Elec. |
| 75th st..... | Illinois Cent. tracks to the Lake... | S. Chi. City Ry. |
| 76th st..... | Halsted to Honore st..... | Calumet Elec. |
| 78th st..... | Railroad ave. to the Lake..... | Calumet Elec. |
| 79th st..... | Stony Island to Ontario ave..... | S. Chi. City Ry. |
| 79th st..... | Vincennes rd. to Halsted st..... | Chi. City Ry. Co. |
| 79th st..... | Vincennes rd. to State st..... | Eng. & Chi. Elec. Ry. |
| 61st st..... | Washington to Wentworth ave.... | Chi. City Ry. Co. |
| 62d st..... | Stony Island to Jefferson ave..... | Chi. City Ry. Co. |
| 63d st..... | Stony Island to Ashland ave..... | Chi. City Ry. Co. |
| 63d st..... | Alley E. of Prairie to Stony Island. | C. & S. S. R. Trans. Co. |
| 64th st..... | Stony Island to Madison ave..... | Chi. City Ry. |
| 64th st..... | Stony Island to Madison ave..... | S. Chi. City Ry. |
| North 64th ave..... | Addison ave. to Irving Park..... | Chi. Elec. Trans. Co. |
| North 66th st..... | South Park to St. Lawrence ave... | Calumet Elec. |
| 67th st..... | Cottage Grove to Stony Island ave. | Calumet Elec. |
| 67th st..... | Cottage Grove ave. to State st.... | Eng. & Chi. Elec. |
| 69th st..... | Calumet to Vincennes ave..... | Eng. & Chi. Elec. |
| 16th st..... | South 46th ave. to South 48th st.... | Ogden St. Ry. |
| 16th st..... | State st. to Western ave..... | Chi. City Ry. Co. |
| Sedgwick st..... | Chicago ave. to Center st..... | N. Chi. St. Ry. |
| Sheffield ave..... | Lincoln ave. to Clark st..... | N. Chi. St. Ry. |
| Southport ave..... | Clybourn pl. to Clark st..... | N. Chi. St. Ry. |

| | | |
|------------------------|--------------------------------------|-----------------------|
| South Park ave | 22d to 23d st | General Elec. |
| South Park ave | 63d to 67th st | Calumet Elec. |
| South Chicago ave . . | Woodlawn ave. to 59th st | Calumet Elec. |
| South Chicago ave . . | Vincennes to Cottage Grove ave . . | Eng. & Chi. Elec. |
| South Chicago ave . . | Cottage Grove to Woodlawn ave . . | Chi. City Ry. Co. |
| State st | 68th to 69th st | Eng. & Chi. Elec. |
| State st | Lake to Division st | N. Chi. St. Ry. Co. |
| State st | Lake to 69th st | Chi. City Ry. |
| State st | Madison to Lake st | W. Chi. St. Ry. Co. |
| Stony Island ave . . . | 62d to 64th st | Chi. City Ry. Co. |
| Stony Island ave . . . | 64th to 97th st | Calumet Elec. |
| Stony Island ave . . . | 64th to 79th st | S. Chi. City Ry. Co. |
| St. Lawrence ave . . . | 66th to 75th st | Calumet Elec. |
| Sunnyside ave | North 46th ct. to North 48th ave . . | Chi. Elec. Trans. Co. |
| Superior ave | 83d to 87th st | S. Chi. City Ry. Co. |

| | | |
|------------------------|---------------------------------------|---------------------|
| Taylor st | Western ave. to River | W. Chi. St. Ry. |
| Torrence ave | 104th to 108th st | S. Chi. City Ry. |
| 12th st | South 40th to South 48th ave | Ogden St. Ry. Co. |
| 12th st | Wabash to South 40th ave | W. Chi. St. Ry. Co. |
| 21st st | Halsted st. to California ave | W. Chi. St. Ry. Co. |
| 22d st | River to Indiana ave | Chi. City Ry. |
| 22d st | River to Ogden ave | Chi. Genl. Ry. Co. |
| 23d st | Canal st. to S. Park ave | Genl. Elec. Co. |
| 24th st | Princeton ave. to Butler st | Genl. Elec. Co. |
| 25th st | Rockwell to Lawndale ave | Chi. Genl. Ry. Co. |
| 26th st | Cottage Grove ave. to Halsted st . . | Chi. City Ry. Co. |
| 26th st | S. 40th ave. to S. 48th ave | Ogden St. Ry. Co. |
| 26th st | Western to S. 40th ave | W. Chi. St. Ry. Co. |
| 27th st | Lawndale to S. 46th ave | Chi. Genl. Co. |
| 28th st | Butler to Union st | Genl. Elec. Co. |
| 29th st | Canal to Wallace st | Chi. City Ry. Co. |
| 31st st | Pitney ct. to the Lake | Chi. City Ry. Co. |
| 31st st | S. 40th to 44th ave | Ogden St. Ry. Co. |
| 31st st | Kedzie to Lawndale ave | Chi. Genl. Co. |
| 35th st | Cottage Grove to California ave . . | Chi. City Ry. Co. |
| 37th st | Wabash to Union ave | Genl. Elec. Ry. Co. |
| 38th st | Archer ave. to Central Park ave . . | Chi. City Ry. Co. |
| 39th st | Halsted st. to Cottage Grove ave . . | Chi. City Ry. Co. |

Union ave 26th to 57th st Genl. Elec. Ry. Co.

| | | |
|-------------------------|---|-----------------------|
| Van Buren st | Wabash ave. to a point between Union ave. and Halsted st | Union Con. Loop Co. |
| Van Buren st | Kedzie ave. to State st | W. Chi. St. Ry. Co. |
| Vernon ave | 63d to 67th st | Eng. & Chi. Elec. Co. |
| Vincennes ave | 67th to 71st st | Eng. & Chi. Elec. Co. |

| | | |
|--------------------|-----------------------------------|-----------------------|
| Vincennes rd..... | State to 79th st | Chi. City Ry. Co. |
| Vincennes rd..... | 79th st. to City limits | Eng. & Chi. Elec. Co. |
| Wabash ave..... | Lake to 22d st | Chi. City Ry. Co. |
| Wabash ave..... | 23d to 63d st | Genl. Elec. Co. |
| Wabash ave..... | Lake to Harrison st | Union Loop Co. |
| Wallace st..... | 29th to Root st..... | Chi. City Ry. Co. |
| Washington ave.... | 60th to 61st st..... | Chi. City Ry. Co. |
| Washington ave.... | Michigan ave. to Tunnel..... | W. Chi. St. Ry. Co. |
| Washington ave.... | Desplaines st. to Tunnel..... | W. Chi. St. Ry. Co. |
| Webster ave..... | Racine to Lincoln ave | N. Chi. St. Ry. Co. |
| Wells st | Michigan to Clark st | N. Chi. St. Ry. Co. |
| Wentworth ave.... | 116th to 119th st | Calumet Elec. Co. |
| Wentworth ave.... | Archer ave. to Vincennes rd | Chi. City Ry. Co. |
| Western ave..... | Archer ave. to 71st st | Chi. City Ry. Co. |
| Western ave..... | Armitage ave. to 26th st..... | W. Chi. St. Ry. Co. |
| Western ave | Elston ave. to Church rd..... | Chi. Elec. Trans. Co. |
| Wood st | 103d to 107th st..... | Eng. & Chi. Elec. Co. |
| Yates ave | 68th to 71st st..... | S. Chi. City Ry. |

MISCELLANEOUS DATA.

| | |
|--|------------------|
| Population of the City | 1,800,000 |
| Total bonded City indebtedness | \$ 17,078,950 00 |
| Equalized valuation of real and personal property | \$244,357,286 00 |
| Assessed valuation of real and personal property | \$206,441,393 00 |
| Recorded transfers of real estate, amount of | \$103,970,720 00 |
| Number of buildings erected in Chicago in 1896 | 6,444 |
| Estimated cost of buildings erected | \$ 22,730,615 00 |
| Number of buildings in Chicago over ten stories high | 37 |
| Number of electric lights used for City purposes | 1,124 |
| Number of miles of streets in Chicago | 2,570 |
| Number of miles of paved streets in Chicago | 1,183.64 |
| Number of miles of sidewalks | 4,863.10 |
| Number of miles of sewers | 1,306 |
| Number of miles of water mains | 1,692 |
| Number of miles of water tunnels in use | 22 |
| Number of miles of water tunnels under construction | 13 |
| Number of traffic tunnels under Chicago river | 3 |
| Number of bridges over the Chicago river | 54 |
| Number of bridges over the Calumet river | 4 |
| Number of bridges over the Illinois and Michigan canal | 6 |
| Number of viaducts over railroad tracks | 39 |
| Number of street lamps in the City | 51,143 |
| Number of miles of river frontage | 41 |
| Number of vessels arriving during the year 1896 | 8,447 |
| Number of vessels departing during the year 1896 | 8,552 |
| Representing a tonnage of | 12,965,812 |
| Number of towing tugs on the Chicago river | 27 |
| Number of school buildings owned by the City | 264 |
| Number of schools opened during the year 1896 | 27 |
| Increased capacity for scholars | 21,222 |
| Number of rented buildings used for school purposes | 146 |
| Total number of scholars enrolled during the year 1896 | 213,825 |
| Number of night schools | 33 |
| Total enrollment of night schools | 9,581 |
| Average number of children attending public schools | 177,710 |
| Value of school buildings, lots and furniture | \$ 20,000,000 00 |
| Number of teachers in public schools | 4,700 |
| Number of railroad systems entering Chicago | 34 |
| Number of street car companies | 18 |
| Number of miles of streets covered by tracks | 342.21 |
| Number of miles of cable railway in Chicago | 41.95 |
| Number of miles of electric railway in Chicago | 255.64 |
| Number of miles of horse car railway in Chicago | 18.46 |
| Number of miles of elevated railway in Chicago | 26.00 |
| Increase over 1889 in street railways, miles ... | 251.96 |

| | |
|---|--------------------|
| Total capital of Chicago city banks, latest report | \$ 34,474,500 00 |
| Total deposits at Chicago city banks, latest report | 186,947,320 00 |
| Surplus and profits | \$ 20,039,698 00 |
| Bank clearings for the year 1896 | \$4,413,054,108 00 |
| Receipts from cards, stamps and envelopes at Chicago post office. | \$ 5,258,704 06 |
| Money orders, amount received and disbursed at Chicago post office..... | \$ 34,122,841 28 |
| Registry of mails..... | 3,403,939 |
| Number of pieces of mail handled at Chicago post office..... | 800,000,000 |
| Number of mail wagons collecting from boxes | 111 |
| Number of clerks employed in Chicago post office | 1,319 |
| Number of carriers employed by Chicago post office..... | 1,096 |
| Number of fire engines in Chicago | 89 |
| Number of engine and hook and ladder houses..... | 109 |
| Number of fire-boats on Chicago and Calumet rivers | 4 |
| Number of hook and ladder trucks..... | 33 |
| Number of chemical fire engines | 27 |
| Number of men employed on Chicago fire department..... | 1,133 |
| Number of horses used by Chicago fire department..... | 447 |
| Number of police and fire alarm boxes..... | 2,543 |
| Number of police stations in Chicago..... | 40 |
| Number of police patrol barns..... | 38 |
| Number of horses in use by police department | 250 |
| Number of patrol wagons..... | 38 |
| Number of ambulances | 7 |
| Number of men on police force in Chicago..... | 3,250 |
| Number of bushels of grain received in Chicago, 1896..... | 242,408,156 |
| Number of barrels of flour received in Chicago, 1896..... | 2,531,995 |
| Number of hogs received in Chicago market in 1896..... | 7,659,472 |
| Number of cattle received in Chicago in 1896..... | 2,600,476 |
| Number of sheep received in Chicago in 1896..... | 3,590,655 |
| Number of horses received in Chicago in 1896..... | 105,978 |
| Number of pounds of cured meats and dressed beef..... | 271,678,601 |
| Number of pounds of lard received..... | 67,191,567 |
| Number of pounds of lard shipped..... | 413,447,968 |
| Number of tons of anthracite and bituminous coal received..... | 6,322,773 |
| Number of feet of lumber received..... | 1,286,643,000 |
| Number of feet of lumber shipped | 599,920,000 |
| Number of breweries in Chicago..... | 56 |
| Output of Chicago breweries for 1896, barrels..... | 3,198,222 |
| Increase in output over 1895, barrels.... | 550,000 |
| Number of malt houses in Chicago | 21 |

Of the fifty-four leading items of our trade by the lake, the following principal ones are selected :

SHIPPED FROM CHICAGO BY LAKE.

| | | |
|---------------------------------------|------------------------|--------------------|
| Flour, barrels..... | 1,736,935 as against | 1,148,489 in 1895 |
| Grain, bushels | 110,952,258 as against | 80,420,296 in 1895 |
| Packages of miscellaneous merchandise | 2,415,236 as against | 1,967,209 in 1895 |

RECEIVED AT CHICAGO BY LAKE.

| | | | | |
|--|-------------|------------|---------------|---------|
| Coal, tons..... | 1,360,300 | as against | 1,268,564 | in 1895 |
| Lumber, laths and shingles, feet.. | 940,116,000 | as against | 1,277,527,000 | in 1895 |
| Grain, bushels..... | 127,821 | as against | 1,507,610 | in 1895 |
| Packages of miscellaneous merchandise..... | 13,230,269 | as against | 9,702,381 | in 1895 |

Comparative statement of entrances and clearances for the fiscal year ending June 30, 1896, from the supervising agent of the Treasury Department:

| | | | |
|---|------------------|--------------------|---------------|
| Baltimore, Md..... | Entrances, 1,810 | Clearances, 2,683 | Total, 4,493 |
| Boston, Mass..... | Entrances, 3,019 | Clearances, 3,243 | Total, 6,262 |
| New Orleans, La..... | Entrances, 1,212 | Clearances, 1,189 | Total, 2,401 |
| Philadelphia, Pa..... | Entrances, 1,846 | Clearances, 2,064 | Total, 3,910 |
| San Francisco, Cal..... | Entrances, 1,105 | Clearances, 1,395 | Total, 2,500 |
| Totals..... | Entrances, 8,922 | Clearances, 10,575 | Total, 19,566 |
| New York, N. Y..... | Entrances, 7,174 | Clearances, 6,788 | Total, 13,962 |
| Chicago, Ill..... | Entrances, 9,263 | Clearances, 9,424 | Total, 18,687 |
| Chicago less than the total for Baltimore, Boston, New Orleans, Philadelphia and San Francisco..... | | | 879 |
| Chicago more than New York.. | | | 4,725 |

Tonnage of the Principal American and European ports, year 1894, from report of Chief of the Bureau of Statistics, Treasury Department, Washington, D. C.:

| | Tons. | | Tons. |
|------------------|------------|--------------------|------------|
| London | 14,433,580 | Antwerp | 10,083,228 |
| Chicago | 10,284,172 | Hamburg | 12,447,706 |
| Liverpool | 10,489,578 | Bremen | 4,325,487 |
| Cardiff | 10,478,394 | New York | 15,333,398 |
| Hull..... | 3,933,123 | Boston | 3,403,682 |
| Tyne ports | 8,655,115 | Philadelphia | 3,173,031 |
| Glasgow..... | 2,760,274 | Baltimore | 2,727,486 |
| Havre | 4,562,692 | New Orleans | 2,230,692 |
| Bordeaux..... | 2,168,472 | San Francisco..... | 3,528,291 |
| Dunkirk..... | 2,381,588 | Puget Sound | 3,654,929 |
| Marseilles | 7,374,591 | Chicago, 1896..... | 12,965,812 |

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Section III.



HOUSE OF ENGINE COMPANY NO. 63
6330 JACKSON AVENUE

❧ ❧ FIRE DEPARTMENT ❧ ❧

REPORT

OF THE

FIRE MARSHAL

TO THE

City Council of the City of Chicago



FOR THE

FISCAL YEAR ENDING DECEMBER 31, 1896

CHICAGO
CAMERON, AMBERG & Co., PRINTERS
1897

FIRE MARSHAL'S REPORT.

OFFICE OF THE FIRE MARSHAL,
CITY HALL, CHICAGO, ILL., JAN. 1, 1897.

To the Honorable the Mayor and Board of Aldermen of the City of Chicago, in Common Council assembled:

GENTLEMEN: Herewith I have the honor to submit to you the Annual Report of the Fire Department for the year ending December 31, 1896, being my eighteenth annual report, and the thirty-ninth of the Paid Fire Department of the City of Chicago.

NEW COMPANIES, ETC.

Engine Company No. 63 removed from their temporary quarters at Sixty-third street and Cottage Grove avenue to the new two-story brick building at 6328 and 6330 Maryland avenue, February 18, 1896.

Engine Company No. 81 was organized October 19, 1896, in quarters formerly occupied by Hose Company No. 1, discontinued on that date.

An appropriation was made in 1895 for a lot and engine house in the vicinity of Ninety-fifth

street and Cottage Grove avenue. It was found desirable to lease, at a nominal rental, a lot on the south side of Ninety-fifth street, near Cottage Grove avenue, on which a house will be at once erected, and an Engine Company installed therein.

A north-front lot, 25 x 138.46 feet, No. 1111 South place, Argyle, was purchased, on which an engine house, already appropriated for, will be erected at an early date.

ESTIMATES.

In my estimates for the ensuing year I shall recommend appropriations for increasing the department, as follows :

For two-story frame house, on lot owned by the City, southwest corner Franklin street and Stewart avenue, for the use of Hook and Ladder Company No. 22.

For engine company with equipment, in quarters now occupied by Hook and Ladder Company No. 22.

For two-story frame building, with engine company equipped, in the vicinity of Western and Graceland avenues, on lot already appropriated for.

For lot and two-story frame house, with engine company equipped, in the vicinity of Crawford avenue and West Thirty-first street.

For lot and two-story frame house, with engine company equipped, in the vicinity of Central Park and Milwaukee avenues.

For two-story brick house, and engine company equipped, on lot owned by the City, in the vicinity of Lawndale avenue and Huron street.

For two new fire engines, to replace those worn out in service.

I shall also recommend that out of the proceeds of the tax now levied on foreign insurance companies, for the benefit of this department, a sufficient amount be appropriated to provide a new steel fire-boat. The property interests of the Calumet region require additional protection, which can best be given by a fire-boat of greater capacity and better equipment than the "Chicago," which is at present the only boat available for that purpose.

I shall further recommend an appropriation from the same fund to provide water mains leading from the Chicago river, to be used by fire-boats, for conveying water by direct pressure in case of fire.

WATER SUPPLY.

The following additions have been made to the water supply for fire purposes during the past year :

| | |
|--|---------------|
| Amount of 4-inch pipe laid | 5,099 feet. |
| Amount of 6-inch pipe laid | 295,435 feet. |
| Amount of 8-inch pipe laid | 108,709 feet. |
| Amount of 12-inch pipe laid | 21,308 feet. |
| Amount of 16-inch pipe laid | 31 feet. |
| Amount of 24-inch pipe laid | 2,020 feet. |
| Total amount of pipe laid during 1896..... | 432,602 feet. |
| Amount of small pipe taken up | 16,292 feet. |
| Net increase for 1895..... | 416,310 feet. |

There are now available for fire purposes 1,691 miles of water mains.

The number of fire hydrants is as follows:

| | Double 2½-inch, combined with 4-inch. | Double 4-inch. | Double 2½-inch. | Single 2½-inch. | TOTAL. |
|----------------------------------|---------------------------------------|----------------|-----------------|-----------------|--------|
| In use December 31, 1895..... | 2,255 | 576 | 9,997 | 3,638 | 16,466 |
| Added during 1896 | 2 | 1 | 612 | 313 | 928 |
| Taken out during 1896..... | | | 6 | 13 | 19 |
| Total in use December 31, 1896.. | 2,257 | 577 | 10,603 | 3,938 | 17,375 |

One fire cistern was built; the number available for fire purposes being ninety-four.

CITY TELEGRAPH.

There were 112 fire alarm and 27 public and 8 private police boxes placed during the year.

There are now in use 1,227 fire alarm boxes, 921 public and 395 private police boxes, making in all 2,543 alarm stations.

The system of overhead wires has been increased by 106.18 miles of new wire. Fifty miles of old wire was abandoned and removed on account of underground extensions. The total length of wire on poles is now 2,630.7 miles.

The underground system has been increased by the addition of 1,692 feet of steel pipe and 30,574 feet of cable of various sizes.

The following table shows the extent of the system:

| Number of Wires. | Feet of Cable. | Feet of Wire. |
|------------------|----------------|---------------|
| 100..... | 5,223..... | 522,200 |
| 75..... | 6,200..... | 465,000 |
| 60..... | 10,659..... | 639,540 |
| 50..... | 5,792..... | 289,600 |
| 40..... | 1,735..... | 69,400 |
| 36..... | 1,121..... | 40,356 |
| 30..... | 18,010..... | 540,300 |
| 26..... | 625..... | 16,250 |
| 25..... | 12,086..... | 302,150 |
| 20..... | 1,337..... | 26,740 |
| 16..... | 20,315..... | 325,040 |
| 15..... | 890..... | 13,350 |
| 12..... | 1,200..... | 14,400 |
| 10..... | 15,243..... | 152,430 |
| 8..... | 6,829..... | 54,632 |
| 7..... | 3,082..... | 21,574 |
| 6..... | 3,345..... | 20,070 |
| 5..... | 116,728..... | 583,640 |
| 4..... | 7,586..... | 30,344 |
| 2..... | 16,883..... | 33,766 |
| Single wire..... | | 380,000 |
| Totals..... | 254,888 | 4,540,782 |

Adding to this the wire on poles gives a total of 3,490 miles of wire.

APPARATUS.

The apparatus of the department, all in good condition, includes 4 fire-boats, 86 steam fire engines, 4 hand engines, 27 chemical engines, 42 hose wagons, 36 hose carriages, 33 hook-and-ladder trucks—all kinds, 53 chemical extinguishers, 68 portable pumps, 2 water towers and 175,812 feet of hose.

At the beginning of the year the department owned 470 horses; during the year 48 were purchased; 10 died; 3 were killed by order of the superintendent of horses; 1 was exchanged; and 27 were condemned as unfit for service, and sold. There are now in the service 477 horses.

VALUATION.

The value of the property in use by the department is as follows:

| | | |
|----------------------------|--------------|----------------|
| Buildings..... | \$689,900 00 | |
| Land | 373,925 00 | |
| Apparatus | 855,247 00 | |
| | <hr/> | \$1,919,072 00 |
| Fire Alarm Telegraph | | 643,392 47 |
| | | <hr/> |
| Total..... | | \$2,562,464 47 |

FORCE OF THE DEPARTMENT.

The present force of the department is as follows:

UNIFORMED.

| | |
|--|-----|
| Fire Marshal and Chief of Brigade..... | 1 |
| First Ass't Fire Marshal and Dep't Inspector | 1 |
| Second Assistant Fire Marshal..... | 1 |
| Third Assistant Fire Marshal | 1 |
| Assistant Fire Marshal and Dep't Secretary | 1 |
| Fire Inspector..... | 1 |
| Chiefs of Battalion | 16 |
| Captains | 103 |
| Lieutenants | 113 |
| Engineers | 88 |
| Assistant Engineers | 80 |
| Pipemen, Truckmen and Drivers, 1st class.. | 155 |
| Pipemen, Truckmen and Drivers, 2d class.. | 354 |
| Pipemen, Truckmen and Drivers, 3d class.. | 50 |
| Pipemen, Truckmen and Drivers, 4th class. | 50 |
| Pilots..... | 8 |
| Stokers | 8 |
| Watchmen | 11 |

NOT UNIFORMED.

| | |
|--------------------------------|---|
| Chief Clerk..... | 1 |
| Clerks..... | 3 |
| Superintendent of Horses | 1 |
| Hostlers | 2 |

7

CITY TELEGRAPH.

| | |
|---|----|
| Superintendent..... | 1 |
| Ass't Superintendent and Chief Operator.. | 1 |
| Chief of Construction | 1 |
| Assistant Chief Operator | 1 |
| Chief Electric Repair Shop | 1 |
| Operators, main office..... | 4 |
| Assistant Operators, main office..... | 3 |
| Operators, branch office..... | 4 |
| Operator, bridge telephone office | 1 |
| Repairers..... | 22 |
| Linemen | 15 |
| Batterymen | 5 |
| Machinists..... | 7 |
| Assistant Machinists | 2 |
| Clerks..... | 2 |
| Book-keeper | 1 |
| Stenographers | 2 |
| Drivers..... | 3 |
| Hostlers | 2 |
| Electric Light Inspectors..... | 8 |

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Total Force 1,135

The uniformed force, exclusive of the Fire Marshal's staff, comprises 81 engine companies (including one double company and four fire-boats), two of which also operate the water towers, 27 hook and ladder companies, and one hose company.

The city is divided into 16 battalion districts, the companies in each district comprising a battalion in charge of an assistant fire marshal, as follows :

| Battalion No. | Headquarters. | Engine Companies. | Hook and Ladder Companies. | Hose Companies. |
|---------------|---------------------|--|----------------------------|-----------------|
| 1 | Engine Co. No. 13. | 1, 10, 13, 21, 32, 37, 40. | 1, 6, 9. | ..... |
| 2 | H. & L. Co. No. 3. | 11, 14, 42. | 3. | ..... |
| 3 | H. & L. Co. No. 10. | 4, 22, 33, 27, 71. | 10. | ..... |
| 4 | Engine Co. No. 35. | 20, 35, 43, 68, 69, 76. | 13, 23. | ..... |
| 5 | H. & L. Co. No. 19. | 3, 17, 30, 57. | 2, 19. | ..... |
| 6 | Engine Co. No. 12. | 12, 24, 26, 34, 44, 67. | 7, 26. | ..... |
| 7 | Engine Co. No. 18. | 5, 6, 7, 18. | 5. | ..... |
| 8 | Engine Co. No. 15. | 15, 23, 25, 28, 41. | 8, 14. | ..... |
| 9 | H. & L. Co. No. 4. | 2, 8, 9. | 4. | ..... |
| 10 | Engine Co. No. 16. | 16, 29, 39, 48, 65. | 11. | ..... |
| 11 | H. & L. Co. No. 18. | 49, 50, 52, 53, 59, 61. | 18. | ..... |
| 12 | Engine Co. No. 51. | { 47, 51, 54, 62, 64, 73, 75, } 80. | 20, 24, 27. | ..... |
| 13 | Engine Co. No. 55. | 55, 56, 70, 78, 79. | 21, 22, 25. | ..... |
| 14 | Engine Co. No. 46. | 46, 58, 72, 74, 81. | 17. | 3. |
| 15 | H. & L. Co. No. 12. | 31, 36, 38, 66, 77. | 12. | ..... |
| 16 | Engine Co. No. 45. | 19, 45, 60, 63. | 15, 16. | ..... |

During the year 71 candidates were certified to this department by the Civil Service Commission; the names of two candidates were stricken from the list for cause and two at their own request; 60 served the required probation of six months satisfactorily and were appointed regular members; 177 promotions were made from a lower to a higher class, 13 members were made lieutenants, 11 assistant engineers were made engineers, 10 lieutenants were made captains, and 2 captains were made assistant fire marshals; 2 members were reduced to an inferior position for cause and 2 at their own request; 1 retired member was reassigned to active duty, 2 members resigned honorably, 26 were discharged, 7 were retired under the provisions of the firemen's pension fund act, and 9 died.

During the year 46 slight, 14 severe, 2 serious and 2 fatal accidents occurred to members of the department while in discharge of duty.

There have been forfeited by members of the department, for violations of its rules and regulations, 697 days' pay.

DEATHS.

Nine members of the department died during the year, as follows:

Benjamin F. Allison, Pipeman, Engine Company No. 12, died January 23, of typhoid fever. He became a member of the department April 13, 1888.

Patrick O'Malley, Assistant Fire Marshal and Chief of the Second Battalion, died February 7, of typhoid fever. He became a member of the department July 5, 1876; was promoted to the rank of Lieutenant February 14, 1878; Captain January 1, 1882, and Assistant Fire Marshal July 18, 1889.

Martin A. McAvoy, Truckman, Hook and Ladder Company No. 9, died February 19, of Bright's disease. He became a member of the department January 7, 1892.

Isidore P. Smith, Assistant Fire Marshal, Chief of the Fourteenth Battalion, was instantly killed by coming in contact with an electric wire while on duty at a fire on the night of May 16. He became a member of the department November 22, 1872; was promoted to the rank of Lieutenant July 6, 1876; Captain September 5, 1885, and Assistant Fire Marshal May 16, 1894.

Cornelius C. Kerin, Pipeman, Engine Company No. 18, died June 7, from injuries received by falling from a pompier ladder while performing practice drill May 29. He became a member of the department July 1, 1888.

Morris Johnson, Lieutenant, Hook and Ladder Company No. 22, died July 28, at Los Angeles, California, of consumption. He became a member of the department October 1, 1888, and was promoted to the rank of Lieutenant December 15, 1893.

John Dore, Truckman, Hook and Ladder Company No. 6, died August 10, of typhoid fever. He became a member of the department March 26, 1892.

James Fitzpatrick, Operator, Main Office, City Telegraph, died August 21, at Hartford, Michigan, of heart failure and collapse induced by cholera morbus. He joined the department as Telegraph Repairer August 14, 1878, and was appointed Operator April 1, 1888.

Patrick Hartigan, Driver, Engine Company No. 52, died December 26, of pneumonia. He became a member of the Town of Lake Department July 11, 1888.

RETIRED.

Nine members were retired under the provisions of the Firemen's Pension Fund Act, as follows :

Hugo Franzen, Captain, Engine Company No. 65, retired January 1, owing to infirmities due to age. He became a member of the department August 20, 1867, and was promoted to the rank of Captain August 25, 1875.

Alfred W. Pendleton, Captain, Engine Company No. 9, owing to infirmities due to age. He became a member of the department June 17, 1877 ; was promoted to the rank of Lieutenant June 30, 1878, and Captain June 1, 1887.

John Riley, Lieutenant, Engine Company No. 66, retired January 1, because of physical disability contracted while in the service. He became a member of the department March 16, 1885, and was promoted to the rank of Lieutenant January 1, 1891.

William Watkins, Engineer, Engine Company No. 21, retired January 1, because of physical disability contracted while in the service. He became a member of the department March 27, 1873, and was appointed Engineer June 1, 1883.

Claudius Blair, Driver, Engine Company No. 19, retired January 1, owing to infirmities due to age. He became a member of the department March 16, 1866.

John B. Jaimeyfield, Pipeman, Engine Company No. 41, retired January 15, owing to infirmities due to age. He became a member of the department August 20, 1874.

Frederick J. Kaeder, Captain, Engine Company No. 21, was temporarily retired April 15, because of injuries received while in the service. He became a member of the department June 13, 1883; was promoted to the rank of Lieutenant July 1, 1887, and Captain December 31, 1889.

James R. Duffy, Engineer, Engine Company No. 52, retired July 1, because of physical disability contracted while in the service. He became a member of the Town of Lake Department April 26, 1883.

John J. Fleming, Pipeman, Engine Company No. 36, retired July 1, because of physical disability contracted while in the service. He became a member of the department June 16, 1882.

EXPENSES.

The following table is a comparative statement of the yearly expenses of the department, with the expense per capita of population and the number of companies maintained for each year since 1870:

| YEAR. | AMOUNT EXPENDED. | POPULATION. | AMOUNT PER CAPITA. | NO. OF COMPANIES. |
|--------|---------------------|-------------|-----------------------|----------------------|
| 1870 | \$ 366,700 66 | 306,605 | \$1 19½ | 26 |
| *1871 | 182,023 15 | 337,000 | 54 | 28 |
| 1872 | 432,057 34 | 367,393 | 1 17½ | 35 |
| 1873 | 586,618 96 | 381,402 | 1 53 | 41 |
| 1874 | 624,795 22 | 395,408 | 1 57 | 43 |
| § 1875 | 411,245 12 | 401,535 | 1 02 | 43 |
| 1876 | 478,340 22 | 407,661 | 1 17 | 41 |
| 1877 | 507,001 12 | 422,196 | 1 20 | 42 |
| 1878 | 389,692 36 | 436,731 | 89 | 42 |
| 1879 | 420,308 82 | 469,515 | 89 | 41 |
| 1880 | 454,304 18 | 503,298 | 90 | 43 |
| 1881 | 568,760 87 | 531,996 | 1 07 | 45 |
| 1882 | 545,021 03 | 560,693 | 97 | 45 |
| 1883 | 556,551 80 | 595,339 | 93 | 45 |
| 1884 | 657,957 46 | 629,985 | 1 04 | 47 |
| 1885 | 717,639 92 | 661,923 | 1 08 | 49 |
| 1886 | 823,413 02 | 693,861 | 1 19 | 52 |
| 1887 | 826,047 74 | 748,256 | 1 10 | 57 |
| 1888 | 893,475 09 | 802,651 | 1 11 | 58 |
| †1889 | 961,201 54 | 900,000 | 1 07 | 59 |
| 1890 | 1,278,337 41 | 1,099,133 | 1 16 | 85 |
| 1891 | 1,378,249 10 | 1,200,000 | 1 15 | 99 |
| 1892 | 1,459,754 93 | 1,438,010 | 1 01½ | 102 |
| 1893 | 1,542,378 17 | 1,500,000 | 1 03 | 105 |
| 1894 | 1,500,542 62 | 1,567,727 | 96 | 107 |
| 1895 | 1,542,596 62 | 1,650,000 | 93½ | 108 |
| 1896 | 1,502,942 66 | 1,750,000 | 86 | 109 |

* Six months. † Annexed territory not included.

§ Nine months ending December 31, 1875.

Your attention is respectfully called to the documents hereto attached, to-wit:

Exhibit "A."—The roster of the department.

Exhibit "B."—Statistics of fires.

Exhibit "C."—Report of the First Assistant Fire Marshal and Department Inspector.

Exhibit "D."—Report of the Assistant Fire Marshal in charge of the Department Repair Shops.

Exhibit "E."—Report of the Superintendent of City Telegraph.

Exhibit "F."—Report of the Fire Inspector.

Respectfully submitted,

D. J. SWENIE,

FIRE MARSHAL.

EXHIBIT "A."

Organization of the Fire Department

HEADQUARTERS, CITY HALL.

D. J. SWENIE,

FIRE MARSHAL AND CHIEF OF BRIGADE.

WILLIAM H. MUSHAM, First Assistant Fire Marshal
and Department Inspector.

JOHN CAMPION.....Second Assistant Fire Marshal.

JOSEPH C. PAZEN.....Third Assistant Fire Marshal.

CHARLES S. PETRIE, Assistant Fire Marshal and De-
partment Secretary.

MICHAEL W. CONWAY.....Fire Inspector.

JAMES HORAN.....Chief of 1st Battalion.

CHARLES F. SEYFERLICH.....Chief of 2d Battalion.

NICHOLAS WEINAND.....Chief of 3d Battalion.

PETER SCHNUR.....Chief of 4th Battalion.

ENER C. ANDERSON.....Chief of 5th Battalion.

JOHN COOK.....Chief of 6th Battalion.

EUGENE SWEENEY.....Chief of 7th Battalion.

JAMES HEANEY.....Chief of 8th Battalion.
WILLIAM H. TOWNSENDChief of 9th Battalion.
DAVID J. MAHONEY.....Chief of 10th Battalion.
JOHN FITZGERALD.....Chief of 11th Battalion.
JOSEPH L. KENYON.....Chief of 12th Battalion.
FREDERICK J. GABRIELChief of 13th Battalion.
MICHAEL R. DRISCOLL.....Chief of 14th Battalion.
PATRICK J. DONOHUE.....Chief of 15th Battalion.
JOHN HANNON.....Chief of 16th Battalion.
WILLIAM R. SMITHChief Clerk.
JOSEPH O'DONOHUE.....Clerk.
JAMES J. SWENIEClerk.
JOHN J. HENNESSYClerk and Storekeeper.
EUGENE SULLIVANSuperintendent of Horses.
THOMAS MONAGHANDriver for Fire Marshal.
RICHARD STRINGER.....Driver of Supply Wagon.

City Telegraph.

CENTRAL OFFICE, CITY HALL.

JOHN P. BARRETT,

SUPERINTENDENT.

DAVID M. HYLAND.....Chief Operator.
WILLIAM CARROLL.....Chief of Construction.
FRANK W. SWENIEOperator.
THOMAS BURNS Operator.
CHARLES A. SHAFER.....Assistant Operator.
FRED. W. GUND.Assistant Operator.
JAMES CROWLEY.....Operator.
EDWARD CARROLL.....Operator.
WILLIAM E. FOLTZRepairer.
JOHN F. MITCHELL Repairer.
JAMES P. DOUGHERTY.....Repairer.
WILLIAM J. MCCORMICK Repairer.
MICHAEL HANLEY Repairer.
HARRY ADAMSON Repairer.
JOHN STACKRepairer.

| | |
|--------------------------|------------------------|
| FRANK J. O'BYRNE | Lineman. |
| JOHN COLLINS | Lineman. |
| SIMON GROBL | Lineman. |
| GEORGE DAVISON | Lineman. |
| WILLIAM O. JACKSON | Lineman. |
| NILS OLSEN | Batteryman. |
| EDWARD J. BARRETT | Batteryman. |
| JOHN B. PORTER..... | Clerk and Book-keeper. |
| JOSEPHINE WILLIAMS..... | Stenographer. |
| CASPER VOIGHT | Driver. |

BRANCH OFFICE.

Sixty-third Street and Wentworth Avenue.

| | |
|---------------------------|---------------------------|
| HARRY LESER..... | Assistant Chief Operator. |
| JOHN FITZPATRICK | Operator. |
| JOHN BURKE | Operator. |
| OWEN B. DOUGHERTY..... | Assistant Operator. |
| JOHN MANGAN..... | Operator. |
| WILLIAM P. HOWLAND..... | Repairer. |
| WILLIAM H. LAWRENCE..... | Repairer. |
| HARRY COURSER..... | Repairer. |
| JOSEPH B. CASAGRANDE..... | Repairer. |
| HAMILTON SAMMONS | Lineman. |
| GEORGE H. RICE..... | Lineman. |
| CHARLES L. GARSON..... | Lineman. |
| VINCENT E. CARROLL..... | Lineman. |
| JEREMIAH CLUNEY, SR. | Batteryman. |
| THOMAS P. SMITH | Batteryman. |

ELECTRIC REPAIR SHOP.

Rice and Lincoln Streets.

JACOB F. MEHREN.... Chief of Electric Repair Shop.
CHARLES F. STRUBBE.....Machinist.
CHRISTIAN NAU.....Assistant Machinist.
HARRY PROBSTAssistant Machinist.

ELECTRIC LIGHT INSPECTION.

Room 16, City Hall.

HARRY H. HORNSBY.....Chief Inspector.
CLARK C. HASKINS.....Inspector.
DANIEL BATTLE Inspector.
ARTHUR L. DEDMOND Inspector.
CHARLES G. RUSH Inspector.
EDWARD Z. LA PLANTEInspector.
CHARLES N. VAN CLEEFInspector.
FULTON GARDNERInspector.
MAGGIE MAHONEY Stenographer.

ENGINE COMPANY No. 1.

271 Fifth Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|---------------------------|-------------------------|--------------------------|
| James J. Ahern..... | Captain..... | 50 Johnson street. |
| Michael A. Quinlan..... | Lieutenant | 316 Aberdeen street. |
| George Leslie..... | Engineer..... | 516 W. Van Buren street. |
| James Connors | Assistant Engineer..... | 23 S. Peoria street. |
| William J. Cahill..... | Pipeman..... | 512 S. Union street. |
| Jeremiah Gleason..... | Pipeman..... | 70 Bunker street. |
| James O'Malley | Pipeman..... | 251 S. May street. |
| Thomas S. Ruff | Pipeman..... | 648 Carroll avenue. |
| Fred W. Winter | Pipeman..... | 633 W. Fifteenth street. |
| Joseph H. Donlin | Pipeman..... | 127 Sedgwick street. |
| Michael J. McDonald | Pipeman | 148 Illinois street. |
| Theodore W. Brockob..... | Pipeman | 87 W. Nineteenth street. |
| Charles E. Barnes | Pipeman | 785 W. Congress street. |
| John A. Knights..... | Driver..... | 275 S. Wood street. |
| Timothy A. McAuliffe..... | Driver..... | 602 N. Paulina. |

ENGINE COMPANY No. 2.

2417 Sanger Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|-----------------------------|-------------------------|--------------------------|
| Michael Cody..... | Captain..... | 3729 Dearborn street. |
| James P. Tracy..... | Lieutenant..... | 3038 Lowe avenue. |
| Timothy A. Moynihan | Engineer | 166 Twenty-fifth place. |
| Charles E. Schnader..... | Assistant Engineer..... | 847 Fifty-fifth street. |
| John S. Clancy..... | Pipeman..... | 2608 Lowe avenue. |
| Berton E. Fisher | Pipeman..... | 533 Twenty-sixth street. |
| Michael J. Prendergast..... | Pipeman..... | 3221 Butler street. |
| Peter Hart | Driver..... | 2919 Parnell avenue. |
| Daniel McNally | Driver..... | 724 Thirty-first street. |

ENGINE COMPANY No. 3.

86 West Erie Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|--------------------------|-------------------------|------------------------|
| Norman N. Holt..... | Captain..... | 747 W. Chicago avenue. |
| Michael Noon..... | Lieutenant..... | 132 Ontario street. |
| George A. Brabant..... | Engineer..... | 321 Noble street. |
| Timothy D. Sullivan..... | Assistant Engineer..... | 29 Keith street. |
| John V. Shay..... | Pipeman..... | 130 W. Adams street. |
| John J. Coogan..... | Pipeman..... | 442 Thirty-seventh st. |
| Jacob J. Schnur..... | Pipeman..... | 288 Noble street. |
| Jacob F. Stramen..... | Pipeman..... | 188 Augusta street. |
| John E. Cook..... | Driver..... | 248 N. May street. |
| Jeremiah J. Daly..... | Driver..... | 428 Grand avenue. |

ENGINE COMPANY No. 4.

524 N. Halsted Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|--------------------------|-------------------------|--------------------------|
| Edward O'Neil..... | Captain..... | 185 Burling street. |
| William J. Mullin..... | Lieutenant..... | 22 Burling street. |
| Edward P. Petrie..... | Engineer..... | 524 N. Halsted street. |
| Patrick Prendergast..... | Assistant Engineer..... | 715 N. Halsted street. |
| Frank Geis..... | Pipeman..... | 39 Lincoln place. |
| John Creamer..... | Pipeman..... | 416 W. North avenue. |
| Henry Willard..... | Pipeman..... | 41 Ayers court. |
| Henry M. Ward..... | Driver..... | 330 W. Van Buren street. |
| Charles Schmelzer..... | Driver..... | 123 Lewis street. |

ENGINE COMPANY No. 5.

197 South Jefferson Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|--------------------------|-------------------------|--------------------------|
| Denis McSweeney | Captain | 107 Elburn avenue. |
| Edward Laubly | Lieutenant..... | 852 Homan avenue. |
| Michael Prendergast..... | Engineer | 289 S. Laffin street. |
| Stephen Cunningham..... | Assistant Engineer..... | 1534 W. Harrison street. |
| Edward W. Purves | Assistant Engineer..... | 14 Cypress street. |
| Charles W. Mahoney..... | Pipeman | 742 W. Van Buren st. |
| Thomas W. Irwin..... | Pipeman..... | 524 Flournoy street. |
| William Hanley..... | Pipeman | Vernon Park place. |
| Sherman T. Quinlan..... | Pipeman..... | 11 Winthrop place. |
| Richard Rice..... | Pipeman..... | 197 S. Jefferson street. |
| Peter F. Quinn..... | Driver..... | 2957 Deering street. |
| John P. Garrity..... | Driver..... | 29 Crosby street. |
| William Quigley | Hostler..... | 101 Washburne avenue. |
| Thomas O'Leary | Hostler..... | 216 Illinois street. |

ENGINE COMPANY No. 6.

143 Maxwell Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|---------------------------|--------------------------|------------------------|
| John J. Evans | Captain | 493 S. Paulina street. |
| Peter W. Werger | Lieutenant..... | 323 Laffin street. |
| Robert Millar | Engineer | 491 Paulina street. |
| Edward T. Griffin | Assistant Engineer | 170 Aberdeen street. |
| Jeremiah J. O'Rourke..... | Pipeman..... | 1157 Harvard street. |
| Jacob Heiselman..... | Pipeman..... | 505 W. Fourteenth st. |
| John W. Garey..... | Pipeman..... | 645 Ashland avenue. |
| James Murnane | Driver..... | 4 Edgemont avenue. |
| William J. Workman | Driver..... | 93 Miller street. |

ENGINE COMPANY No. 7.

31 Blue Island Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|---------------------------|-------------------------|--------------------------|
| John Lynch..... | Captain..... | 1042 W. Taylor street. |
| Frank J. Donegan..... | Lieutenant..... | 342 Troy street. |
| Michael D. Keefe..... | Engineer..... | 1203 W. Thirteenth st. |
| John R. Cornish..... | Assistant Engineer..... | 304 S. Morgan street. |
| Peter Rowe..... | Pipeman..... | 597 W. Twentieth street. |
| Thomas J. Hogan..... | Pipeman..... | 121 Washburne avenue. |
| Frank J. Champion..... | Pipeman..... | 322 S. Centre avenue. |
| John Bohanan..... | Pipeman..... | 31 Blue Island avenue. |
| Martin Murphy..... | Driver..... | 31 Blue Island avenue. |
| William Moir..... | Driver..... | 256 W. Congress street. |
| Frederick W. Buehler..... | Watchman..... | 370 S. Peoria street. |

ENGINE COMPANY No. 8.

1931 Archer Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|-------------------------|-------------------------|--------------------------|
| Robert P. O'Connor..... | Captain..... | 3000 Archer avenue. |
| John Barlow..... | Lieutenant..... | 2717 Lowe avenue. |
| Edward R. Spies..... | Engineer..... | 351 Twenty-fourth st. |
| Paul A. Kwarenberg..... | Assistant Engineer..... | 10838 Indiana avenue. |
| Edward Morgan..... | Pipeman..... | 1931 Archer avenue. |
| Michael O'Hara..... | Pipeman..... | 1931 Archer avenue. |
| James Fountain..... | Pipeman..... | 623 Loomis street. |
| Patrick F. O'Neill..... | Pipeman..... | 824 Matteson street. |
| Daniel I. Cleghorn..... | Driver..... | 1931 Archer avenue. |
| Stephen Keegan..... | Driver..... | 351 Twenty-sixth street. |
| Alfred Phillips..... | Supply Driver..... | 1931 Archer avenue. |
| David J. O'Brien..... | Watchman..... | 277 Peoria street. |

ENGINE COMPANY No. 9.

2527 Cottage Grove Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|-------------------------|-------------------------|-------------------------|
| Charles Buerger..... | Captain | 75 Twenty-ninth street. |
| John Skopec..... | Lieutenant..... | 2830 Calumet avenue. |
| George Leady | Engineer | 3554 La Salle street. |
| John G. McEvoy..... | Assistant Engineer..... | 598 S. Union street. |
| Lorenz C. Schnidt..... | Pipeman..... | 2812 South Park avenue. |
| John McHugh..... | Pipeman | 2527 Cottage Grove ave. |
| Arthur Peake..... | Pipeman..... | 2527 Cottage Grove ave. |
| Jacob N. Reis..... | Driver..... | 3606 Cottage Grove ave. |
| Alexander D. Lannon.... | Driver..... | 3833 Rhodes avenue. |

ENGINE COMPANY No. 10.

82 Pacific Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|------------------------|-------------------------|-------------------------|
| John C. McDonnell..... | Captain | 82 Pacific avenue. |
| Patrick M. Murphy..... | Lieutenant..... | 114 Sebor street. |
| Samuel U. Neild..... | Engineer | 2084 Van Buren street. |
| John L. Sullivan.. .. | Assistant Engineer..... | 314 W. Congress street. |
| Herman C. Haas..... | Pipeman..... | 94 Laflin street. |
| Patrick J. Healey..... | Pipeman..... | 342 Twenty-second st. |
| John L. Flood..... | Pipeman..... | 4226 S. Western avenue. |
| James Hrach..... | Pipeman..... | 831 Ashland avenue. |
| Patrick Egan..... | Pipeman..... | 109 Sholto street. |
| James Duff..... | Pipeman..... | 10627 Avenue O. |
| George F. Kelly..... | Driver... .. | 43 Spruce street. |
| James W. Wall..... | Driver | 354 Wabash avenue. |
| Stephen Paine | Supply Driver..... | 1813 State street. |

ENGINE COMPANY No. 11.

225 Michigan Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|--------------------------|-------------------------|--------------------------|
| Martin Lacey | Captain..... | 86 Superior street. |
| Jeremiah Herlihy | Lieutenant..... | 424 Sedgwick street. |
| John Hassis..... | Engineer..... | 1395 Osgood street. |
| William C. Rudder..... | Assistant Engineer..... | 306 Sheffield avenue. |
| Robert J. Mooney | Pipeman..... | 203 Chestnut street. |
| James Hosey | Pipeman..... | 326 Roscoe street. |
| Patrick Nolan..... | Pipeman..... | 13 Sholto street. |
| Charles G. Perry..... | Pipeman..... | 236 Hudson avenue. |
| Benjamin F. Moran..... | Pipeman..... | 45 Ontario street. |
| William H. Schubert..... | Pipeman..... | 28 Beethoven place. |
| James Kennedy..... | Driver..... | 229 North Market street. |
| Edward Smith..... | Driver..... | 2431 116th street. |

ENGINE COMPANY No. 12.

611 West Lake Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|-------------------------|-------------------------|-------------------------|
| Patrick Foley | Captain | 476 S. Paulina street. |
| James Drew..... | Lieutenant..... | 491 S. Robey street. |
| Dominick Malatesta..... | Engineer..... | 596 Fulton street. |
| Matthew J. O'Grady..... | Assistant Engineer..... | 483 W. Ohio street. |
| James F. Hurley..... | Pipeman..... | 611 W. Lake street. |
| Archie F. Bennett..... | Pipeman..... | 73 Walnut street. |
| Angus McMillan..... | Pipeman..... | 11 Ayres court. |
| Albert F. Fromm..... | Pipeman..... | 1124 W. Thirteenth st. |
| William E. McCann..... | Driver..... | 205 W. Congress street. |
| Peter Shannon..... | Driver..... | 429 W. Ohio street. |

ENGINE COMPANY No. 13.

19 Dearborn Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|----------------------------|-------------------------|-----------------------|
| Alexander C. Kopeto..... | Captain..... | 234 Cornell street. |
| John Waldie | Lieutenant..... | 685 W. Lake street. |
| John G. Van Zandt | Engineer..... | 7 Carl street. |
| William H. Kline | Assistant Engineer..... | 43 LeMoyné street. |
| John Davis..... | Pipeman..... | 7 Walnut street. |
| Thomas J. Craig | Pipeman | 19 Dearborn street. |
| Michael J. Cummings.... | Pipeman..... | 19 Dearborn street. |
| Martin Henry | Pipeman..... | 122 DeKoven street. |
| Alexander J. Ellickson.... | Pipeman..... | 580 Burling street. |
| Edward A. Briggs..... | Pipeman..... | 685 W. Lake street. |
| John Murphy..... | Driver..... | 1465 Fillmore street. |
| William Kiely..... | Driver..... | 130 Thirteenth place. |

ENGINE COMPANY No. 14.

38 East Chicago Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|----------------------------|-------------------------|----------------------------|
| William D. Quirk..... | Captain..... | 38 E. Chicago avenue. |
| Marinus L. Strook..... | Lieutenant..... | 440 W. Huron street. |
| Michael Sullivan | Engineer..... | 1899 N. Marshfield ave. |
| Samuel Poole | Assistant Engineer..... | 267 N. State street. |
| Frederick Reichentroch.... | Pipeman | 386 Clybourn avenue. |
| Albert F. Rinkenberger ... | Pipeman..... | 602 Fremont street, L. V. |
| Thomas Curry..... | Pipeman..... | 98 E. Huron street. |
| John E. Haeberle..... | Pipeman..... | 325 Hampton court. |
| Frank A. Charleston | Pipeman..... | 1307 Wellington st., L. V. |
| Thomas R. Madden..... | Driver..... | 236 N. Franklin street. |
| Patrick O'Neil | Supply Driver..... | 584 Francisco street. |
| Henry Bassett | Watchman..... | 1430 Fortieth court. |

ENGINE COMPANY No. 15.

373 West Twenty-second Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|--------------------------|--------------------------|------------------------------|
| James Enright | Captain..... | 2944 Deering street. |
| Edward P. Phelan..... | Lieutenant..... | 142 Loomis street. |
| John A. O'Donnell | Engineer | 767 W. Twenty-second street. |
| Nick Falk..... | Assistant Engineer | 151 W. Twenty-second place. |
| William E. Hartney | Pipeman..... | 706 Hinman street. |
| Edward J. Byrne | Pipeman..... | 667 W. Twenty-second street. |
| John Cavanaugh..... | Pipeman..... | 920 Ashland avenue. |
| Julius H. Bauer..... | Pipeman..... | 690 W. Twenty-first street. |
| Peter R. Carroll..... | Driver..... | 362 Johnson street. |
| Michael Cunneen..... | Driver..... | 88 W. Twenty-second place. |
| John Quinn..... | Supply Driver..... | 613 S. Centre avenue. |
| John O'Day | Watchman..... | 217 W. Twenty-fifth st. |

ENGINE COMPANY No. 16.

347 Thirty-first Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|---------------------------|-------------------------|--------------------------|
| James T. Foley | Captain..... | 2844 Lowe avenue. |
| John M. Hughes..... | Lieutenant..... | 622 Sheffield avenue. |
| Henry Hughes. | Engineer..... | 3134 Fifth avenue. |
| Frederick J. Kaufman.... | Assistant Engineer..... | 347 Thirty-first street. |
| Charles P. Becker..... | Pipeman..... | 347 Thirty-first street. |
| John F. Dubach..... | Pipeman..... | 3006 Fifth avenue. |
| Charles L. McElligott.... | Pipeman..... | 2920 Wallace street. |
| Peter J. Nolan..... | Pipeman..... | 3243 Pierce avenue. |
| Edward Moran | Driver..... | 490 Thirtieth street. |
| Charles Scouten | Driver..... | 3459 Wentworth avenue. |

ENGINE COMPANY No. 17.

80 West Lake Street.

DOUBLE COMPANY.

| MEMBERS. | POSITION. | RESIDENCE. |
|---------------------------|-------------------------|------------------------|
| Timothy J. Smith..... | Captain..... | 185 N. Paulina street. |
| Arney E. Banks | Lieutenant..... | 25 Fry street. |
| John F. Smith..... | Lieutenant..... | 456 Fulton street. |
| James Dempsey..... | Engineer..... | 779 Winchester avenue. |
| John Meadows..... | Engineer..... | 671 W. Lake street. |
| Stephen J. Barry..... | Assistant Engineer..... | 329 Marshfield avenue. |
| Bartholomew J. Murtaugh. | Assistant Engineer..... | 257 Austin avenue. |
| Alexander Micheletti..... | Pipeman..... | 238 N. Curtis street. |
| John Flavin..... | Pipeman..... | 51 Cleveland avenue. |
| John H. Ashbaugh..... | Pipeman..... | 80 W. Lake street. |
| Edmond Haegele..... | Pipeman..... | 262 N. May street. |
| Michael R. Savage..... | Pipeman..... | 7701 Dobson avenue. |
| Andrew Hengle..... | Pipeman..... | 189 Mohawk street. |
| Oscar Peters | Pipeman..... | 202 N. May street. |
| Herman Wehrle..... | Pipeman..... | 195 Aberdeen street. |
| Daniel Toomey..... | Driver..... | 114 Sebor street. |
| Albert E. Nichols..... | Driver..... | 45 Bryan place. |
| Edward J. Sullivan | Driver..... | 197 Morgan street. |
| Lawrence Redmond..... | Supply Driver..... | 80 W. Lake street. |

ENGINE COMPANY No. 18.

438 West Twelfth Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|--------------------------|--------------------------|---------------------------|
| John McDonough | Captain | 547 S. Leavitt street. |
| John Duffy | Lieutenant | 378 S. Paulina street. |
| Harry Clohecy | Engineer | 515 S. Whipple street. |
| Dennis J. Ryan | Assistant Engineer | 533 S. Whipple street. |
| James J. Sullivan | Pipeman | 733 W. Twenty-first st. |
| Matthias T. McDonough .. | Pipeman | 137 Elizabeth street. |
| Harry S. Gaghagen | Pipeman | 763 W. Twelfth street. |
| Charles B. Ryan | Pipeman | 85 Hudson avenue. |
| Henry L. Strening | Driver | 521 W. Fourteenth street. |
| Charles Riley | Driver | 537 Washburne avenue. |

ENGINE COMPANY No. 19.

3444 Rhodes Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|---------------------------|--------------------------|--------------------------|
| James Crapo | Captain | 3444 Rhodes avenue. |
| Frank J. Goodwin | Lieutenant | 3725 Rhodes avenue. |
| Joseph A. McLaughlin .. | Engineer | 4218 Prairie avenue. |
| John J. Furey | Assistant Engineer | 1516 W. Park avenue. |
| Cassius M. Ward | Pipeman | 123 Thirty-third street. |
| Patrick McCormick | Pipeman | 3249 S. State street. |
| Francis J. Faulkner | Pipeman | 344 Ohio street. |
| William Allaby | Driver | 3451 Rhodes avenue. |
| Milford H. Vaught | Driver | 3444 Rhodes avenue. |

ENGINE COMPANY No. 20.

39 Rawson Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|-------------------------|-------------------------|-------------------------|
| William T. M. Figg..... | Captain..... | 152 Potomac avenue. |
| Charles Szeszycki..... | Lieutenant..... | 415 Potomac avenue. |
| John J. Gleason..... | Engineer..... | 219 W. North avenue. |
| Herman A. Allen..... | Assistant Engineer..... | 1693 Spalding avenue. |
| Frank C. Karst..... | Pipeman..... | 764 N. Ashland avenue. |
| James J. Connell..... | Pipeman..... | 822 N. Robey street. |
| John J. Mundy..... | Pipeman..... | 183 N. Sangamon street. |
| Michael Heaney..... | Driver..... | 254 Wabansia avenue. |
| Frank U. Bass..... | Driver..... | 39 Rawson street. |

ENGINE COMPANY No. 21.

13 Taylor Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|--------------------------|-------------------------|-----------------------|
| Oscar F. Malmberg..... | Captain..... | 90 Sedgwick street. |
| Richard T. Caesar..... | Lieutenant..... | 3244 Dearborn street. |
| Samuel McDowell..... | Engineer..... | 148 Wabash avenue. |
| James E. Anthony..... | Assistant Engineer..... | 4114 Hart avenue. |
| George W. Rucker..... | Pipeman..... | 2836 Dearborn street. |
| Joseph C. Wickliffe..... | Pipeman..... | 2549 State street. |
| Frank W. Wright..... | Pipeman..... | 1614 Dearborn street. |
| Benj. F. Ramsey..... | Pipeman..... | 2408 Dearborn street. |
| Anthony Makeus..... | Driver..... | 2811 State street. |
| Marshall Ward..... | Driver..... | 13 Taylor street. |

ENGINE COMPANY No. 22.

458 Webster Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|-------------------------|-------------------------|-----------------------|
| James J. Walsh..... | Captain..... | 249 Garfield avenue. |
| William Schubert..... | Lieutenant..... | 123 Osgood street. |
| Francis Berry..... | Engineer..... | 203 Lincoln avenue. |
| Thomas P. Hoey..... | Assistant Engineer..... | 374 Lincoln avenue. |
| William Mullin..... | Pipeman..... | 1018 Halsted street. |
| William McDermott..... | Pipeman..... | 162 Seminary avenue. |
| Frederick H. Stift..... | Pipeman..... | 203 Sheffield avenue. |
| Henry Napp..... | Pipeman..... | 331 Dayton street. |
| Rudolph A. Rossow..... | Driver..... | 129 Osgood street. |
| Herman Rupp..... | Driver..... | 166 Seminary avenue. |

ENGINE COMPANY No. 23.

693 Hinman Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|----------------------|-------------------------|----------------------------|
| John C. Goodwin..... | Captain..... | 549 S. Leavitt street. |
| John P. Simon..... | Engineer..... | 147 W. Twenty-second pl. |
| Frank J. Belsky..... | Assistant Engineer..... | 612 W. Eighteenth st. |
| Timothy Cronin..... | Pipeman..... | 887 Blue Island avenue. |
| Joseph Farrell..... | Pipeman..... | 2510 Calumet avenue. |
| Anton Leiber..... | Pipeman..... | 2709 Iglehart court. |
| Frank D. Rourke..... | Pipeman..... | 369 E. Fifty-fifth street. |
| Michael Barrett..... | Driver..... | 847 W. Twenty-second st. |
| John J. O'Brien..... | Driver..... | 468 S. Paulina street. |

ENGINE COMPANY No. 24.

542 and 544 Warren Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|--------------------------|-------------------------|-------------------------|
| Charles E. Case | Captain | 1126 Wilcox avenue. |
| William H. Bartlett..... | Lieutenant. | 1030 W. Monroe street. |
| Martin Aldrich..... | Engineer | 545 Warren avenue. |
| William E. Klug..... | Assistant Engineer..... | 2559 Crawford avenue. |
| James Whelan..... | Pipeman..... | 1140 Jackson boulevard. |
| Edward W. Ivison..... | Pipeman..... | 139 Owasco street. |
| Frederick Bruhn..... | Pipeman..... | 40 N. Hoyne avenue. |
| James Hanrahan..... | Driver..... | 1318 W. Adams street. |
| John Dooley | Driver | 1333 Jackson boulevard. |

ENGINE COMPANY No. 25.

127 Canalport Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|--------------------------|-------------------------|--------------------------|
| Christian Schimmels..... | Captain | 571 S. Halsted street. |
| Patrick Carroll | Lieutenant | 2914 Parnell avenue. |
| Nicholas L. Keegan..... | Engineer | 735 S. May street. |
| John Knipper | Assistant Engineer..... | 127 Canalport avenue. |
| James J. O'Dea..... | Pipeman..... | 2946 Deering avenue. |
| Michael Cummings..... | Pipeman..... | 109 Newberry avenue. |
| Frederick F. Hilmes..... | Pipeman..... | 749 Twenty-first place. |
| Joseph M. Kelly..... | Driver..... | 215 Peoria street. |
| James Doyle | Driver..... | 460 W. Fifteenth street. |

ENGINE COMPANY No. 26.

142 North Lincoln Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|--------------------------|-------------------------|----------------------|
| Michael Kearins..... | Captain..... | 330 Loomis street. |
| Thomas Dougherty | Lieutenant..... | 634 W. Erie street. |
| John A. Prindergast..... | Engineer..... | 420 W. Huron street. |
| George Hoben..... | Assistant Engineer..... | 402 N. Robey street. |
| Thomas P. O'Leary..... | Pipeman..... | 452 N. Robey street. |
| George A. Kawales... .. | Pipeman..... | 55 Emerson avenue. |
| Michael J. McLean..... | Pipeman..... | 634 W. Erie street. |
| John A. Sampson..... | Driver..... | 498 Grand avenue. |
| Andrew Ryder | Driver..... | 106 Emerson avenue. |
| Philip E. Haas | Supply Driver..... | 327 Grand avenue. |

ENGINE COMPANY No. 27.

437 Wells Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|------------------------|-------------------------|----------------------|
| George L. Taylor..... | Captain..... | 360 Wells street. |
| Thomas Flavin..... | Lieutenant..... | 51 Cleveland avenue. |
| John Calahan... .. | Engineer..... | 532 N. Park avenue. |
| Joseph A. Skelly | Assistant Engineer..... | 341 W. Ohio street. |
| George E. Geis..... | Pipeman..... | 429 Elm street. |
| Frank Burger..... | Pipeman | 42 Willow street. |
| Charles Herbig..... | Pipeman... .. | 45 Eugenie street. |
| James McCormick | Pipeman..... | 82 Hill street. |
| John M. Hardell..... | Driver..... | 58 Goethe street. |
| John H. Rech..... | Driver..... | 62 Mohawk street. |

ENGINE COMPANY No. 28.

2867 Deering Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|---------------------------|-------------------------|-----------------------|
| Edward J. Buckley | Captain..... | 127 Townsend street. |
| Michael A. Curry | Lieutenant..... | 2957 Bonfield street. |
| William J. Porter | Engineer | 2918 Parnell avenue. |
| Matthew J. Blaney | Assistant Engineer..... | 2918 Archer Avenue. |
| Timothy C. Fallon..... | Pipeman..... | 2917 Bonfield street. |
| John J. Hickey | Pipeman..... | 845 Hinman street. |
| Patrick Moriarty..... | Pipeman..... | 3154 Wallace street. |
| Bartholomew Cloonan.... | Driver..... | 2969 Deering street. |
| Michael J. Corrigan | Driver..... | 2936 Main street. |

ENGINE COMPANY No. 29.

846 Thirty-fifth Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|--------------------------|-------------------------|-----------------------|
| Dennis N. Doyle | Captain..... | 3123 Archer avenue. |
| Otto H. Miller..... | Lieutenant..... | 3028 Lowe avenue. |
| Charles L. Corey | Engineer..... | 3248 Illinois avenue. |
| Edward A. W. Sutherland. | Assistant Engineer..... | 3331 Armour avenue. |
| John O'Leary..... | Pipeman..... | 3023 Lowe avenue. |
| Richard Ryan | Pipeman..... | 3436 Parnell avenue. |
| Louis F. Keegan..... | Pipeman..... | 3652 Emerald avenue. |
| Patrick Fleming..... | Driver..... | 4522 St. Lawrence av. |
| Robert J. Daley..... | Driver..... | 3606 Dearborn street. |

ENGINE COMPANY No. 30.

514 N. Ashland Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|-------------------------|-------------------------|-------------------------|
| John S. Hanson..... | Captain | 276 N. May street. |
| Charles L. Schulze..... | Lieutenant..... | 458 W. Division street. |
| George J. Fuller.... | Engineer | 334 N. Winchester ave. |
| Paul Rehnert..... | Assistant Engineer..... | 75 Fry street. |
| Thomas Murray..... | Pipeman..... | 514 N. Ashland avenue. |
| James S. Barry..... | Pipeman..... | 358 W. Erie street. |
| Paul Smiskol..... | Pipeman..... | 943 N. Lincoln street. |
| Charles H. Wirth..... | Driver..... | 467 N. Winchester ave. |
| Otto Minich | Driver | 517 N. Robey street. |

ENGINE COMPANY No. 31.

760 West Congress Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|------------------------|-------------------------|---------------------------|
| James Ward..... | Captain | 230 Washtenaw avenue. |
| Arthur J. Kelly..... | Lieutenant..... | 1201 W. Monroe street. |
| William M. Wise..... | Engineer | 17 Winthrop place. |
| John L. Damon..... | Assistant Engineer..... | 478 S. Robey street. |
| Thomas R. Quirk..... | Pipeman..... | 46 Seldon street. |
| James McCambridge | Pipeman | 1002 Jackson boulevard. |
| David Anderson..... | Pipeman..... | 850 W. Polk street. |
| James Dusenbury..... | Driver..... | 618 W. Thirteenth street. |
| Lawrence Droney..... | Driver..... | 1436 W. Congress street. |

ENGINE COMPANY No. 32.

Foot of Monroe Street, Lake Front.

| MEMBERS. | POSITION. | RESIDENCE. |
|--------------------------|-------------------------|------------------------|
| Thomas L. Conway..... | Captain..... | 643 N. Halsted street. |
| James H. Carroll..... | Lieutenant..... | 679 Hinman street. |
| George W. McGhie..... | Engineer | 683 W. Chicago avenue. |
| William F. Graham | Assistant Engineer..... | 49 Bryan place. |
| James J. Timmons..... | Pipeman..... | 296 W. Huron street. |
| Edward J. Callaghan..... | Pipeman..... | 202 Centre avenue. |
| Patrick Grant..... | Pipeman..... | 829 Carroll avenue. |
| Edward F. McGurn..... | Pipeman..... | 39 Elburn avenue. |
| Thomas J. Ehret | Pipeman..... | 2070 N. Clark. |
| Edward W. Berquist | Pipeman..... | 11335 Curtis avenue. |
| James R. Hughes..... | Driver..... | 3228 Butler street. |
| Dennis J. Brennan... .. | Driver..... | 262 S. Morgan street. |

ENGINE COMPANY No. 33.

150 Southport Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|---------------------------|-------------------------|-----------------------|
| Frank Conway..... | Captain | 318 Webster avenue. |
| Henry Becker..... | Lieutenant..... | 288 Hudson avenue. |
| Francis R. Sowersby..... | Engineer | 95 Clifton avenue. |
| Julius C. Felke..... | Assistant Engineer..... | 601 Clybourn avenue. |
| Clemens Moringer..... | Pipeman..... | 83 Mohawk street. |
| William F. Stubinger..... | Pipeman..... | 1680 Ashland avenue. |
| John Stift | Pipeman..... | 207 Sheffield avenue. |
| George Steuernagel..... | Driver..... | 126 Webster avenue. |
| Theodore Hidding | Driver.. .. | 129 Lewis street. |

ENGINE COMPANY No. 34.

19 South Curtis Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|------------------------|-------------------------|------------------------|
| John B. Listman..... | Captain | 117 Cornell street. |
| Michael Ehret..... | Lieutenant..... | 2070 N. Clark street. |
| George M. Murphy..... | Engineer | 148 Milwaukee avenue |
| Andrew E. Skelly.... | Assistant Engineer..... | 173 Austin avenue. |
| John O'Neill..... | Pipeman... .. | 47 Sheridan place. |
| Joseph F. Wall..... | Pipeman..... | 249 S. May street. |
| John J. Doyle..... | Pipeman | 268 Fulton street. |
| William E. Kurth | Pipeman..... | 567 N. California ave. |
| Dennis Leyden..... | Driver..... | 535 W. Polk street. |
| Martin M. Moran | Driver..... | 138 Milton avenue. |

ENGINE COMPANY No. 35.

782 North Robey Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|---------------------------|-------------------------|------------------------|
| Thomas Webber..... | Captain..... | 831 Cortland street. |
| Jeremiah McAuliffe.... | Lieutenant.. .. | 645 Maplewood avenue. |
| Charles L. Gottschalk.... | Engineer | 701 Shober street. |
| Thomas A. Doolan..... | Assistant Engineer..... | 874 Shober street. |
| William C. Fisher..... | Pipeman... .. | 154 Evergreen avenue. |
| John Carmody | Pipeman..... | 688 Armitage avenue. |
| Daniel J. Lysaught..... | Pipeman..... | 405 N. Wood street. |
| William L. Heartt..... | Driver..... | 791 N. Leavitt street. |
| Erick Erickson..... | Driver..... | 796 Dudley street. |

ENGINE COMPANY No. 36.

243 W. Twenty-fifth Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|--------------------------|--------------------------|----------------------------|
| John Hall | Captain | 474 Paulina street. |
| John Canty..... | Lieutenant..... | 366 S. Western avenue. |
| Ernest A. Pannier..... | Engineer | 967 Clifton Park avenue. |
| William A. Marggraf..... | Assistant Engineer | 244 Twenty-fifth street. |
| Thomas H. Halpin..... | Pipeman..... | 1151 Oakley avenue. |
| William Freitag | Pipeman..... | 954 W. Twenty-first place. |
| Christian Heiser..... | Driver..... | 1131 Oakley avenue. |
| Joseph P. Carey..... | Driver..... | 2306 Union avenue. |

ENGINE COMPANY No. 37.

Fire-boat Yosemite.

Foot of La Salle Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|-------------------------|-----------------|--------------------------|
| Patrick J. Falvey | Captain | 334 N. Market street. |
| Joseph Devitt..... | Lieutenant..... | 184 N. State street. |
| Charles H. Waters | Engineer | 1097 W. Taylor street. |
| Alexander D. Brown..... | Engineer | 176 S. Water street. |
| Thomas Matthews..... | Stoker..... | 140 Eugenie street. |
| James O. Larsen..... | Stoker..... | 53 Florimond street. |
| James F. Nolan..... | Pilot | 105 N. Clark street. |
| John Hubbard..... | Pilot | 224 N. Halsted street. |
| John Flynn..... | Pipeman..... | 460 E. North avenue. |
| Hans Hanson..... | Pipeman..... | 203 N. Carpenter street. |
| Martin Simmons..... | Pipeman..... | 443 S. Robey street. |

ENGINE COMPANY No. 38.

1071 Bonney Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|---------------------------|-------------------------|-------------------------------|
| Patrick J. Jennings..... | Captain..... | 477 S. Robey street. |
| George H. McAllister..... | Lieutenant..... | 863 Central Park avenue. |
| George B. Hargan..... | Engineer..... | 876 Clifton Park avenue. |
| William McDonald | Assistant Engineer..... | 1265 Hamlin avenue. |
| John Belsky..... | Pipeman..... | 1840 W. Twenty-second street. |
| John G. Risedorph..... | Driver..... | 1664 Ogden avenue. |

ENGINE COMPANY No. 39.

1326 Thirty-third Court.

| MEMBERS. | POSITION. | RESIDENCE. |
|-------------------------|-------------------------|----------------------------|
| Stephen Scanlon | Captain | 3547 Hamilton avenue. |
| John T. Fleming | Lieutenant..... | 3516 Ashland avenue. |
| James Conroy..... | Engineer | 1412 Thirty-fourth street. |
| Joseph A. McCourt..... | Assistant Engineer..... | 1413 S. Fortieth court. |
| John Kaufmann | Pipeman..... | 1445 Thirty-fourth court. |
| John J. Hanlon | Pipeman..... | 3422 Wood street. |
| Rudolph F. Pauley..... | Pipeman..... | 383 W. Thirteenth place. |
| John J. Kelly..... | Driver..... | 1459 Thirty-fourth st. |
| Edward M. Sweeney | Driver..... | 3433 Marshfield avenue. |

ENGINE COMPANY No. 40.

83 South Franklin Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|-------------------------|-------------------------|--------------------------|
| John Klett..... | Captain | 200 E. Division street. |
| John J. Miller..... | Lieutenant..... | 718 W. Twentieth street. |
| Andrew H. McPherson.... | Engineer | 63 Whiting street. |
| Gustav Lundgren..... | Assistant Engineer..... | 137 W. Erie street. |
| William Fleming..... | Pipeman..... | 83 S. Franklin street. |
| Frank Tonynger | Pipeman..... | 219 Walnut street. |
| William G. Flood..... | Pipeman... .. | 201 Huron street. |
| Harry M. Shaw | Pipeman..... | 113 E. Erie street. |
| Joseph E. Lacey | Pipeman..... | 3920 La Salle street. |
| John M. Bidinger..... | Pipeman..... | 355 Fifth avenue. |
| William Dooley | Driver..... | 342 Henry street. |
| Jerome I. Brown..... | Driver..... | 178 Washburne avenue. |

ENGINE COMPANY No. 41.

Fire-boat Geyser.
Sampson's Slip.

| MEMBERS. | POSITION. | RESIDENCE. |
|---------------------------|-----------------|------------------------------|
| Patrick Doyle | Captain | 55 Winthrop place. |
| Martin Harrington | Lieutenant..... | 585 S. Kedzie avenue. |
| Daniel F. Rice..... | Engineer | 280 Hudson avenue. |
| John F. Wein..... | Engineer | 2836 W. Fortieth court. |
| William N. Penn..... | Stoker..... | 3016 State street. |
| Paul Ferrigan..... | Stoker..... | 2832 W. Fortieth court. |
| James Tobin..... | Pilot | 3040 Main street. |
| William M. Moore..... | Pilot | 3040 Main street. |
| David J. Frey..... | Pipeman..... | 763 W. Thirteenth street. |
| Martin J. Fitzgerald..... | Pipeman... .. | 3308 S. Ashland avenue. |
| Harry Den Besten | Pipeman..... | 869 W. Twenty-second street. |

ENGINE COMPANY No. 42.

77 and 79 Illinois Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|--------------------------|-------------------------|-------------------------|
| Joseph A. McCormick | Captain | 106 Lewis street. |
| Edward A. McGourke | Lieutenant..... | 364 Franklin street. |
| John J. Berry..... | Engineer | 65 Beethoven street. |
| John J. O'Connor..... | Assistant Engineer..... | 127 Orleans street. |
| William H. Shannon..... | Pipeman..... | 132 Hudson avenue. |
| John Gallagher..... | Pipeman..... | 209 E. Erie street. |
| Louis A. Smolar..... | Pipeman..... | 151 Sedgwick street. |
| James Byrnes..... | Pipeman..... | 357 Sedgwick street. |
| Ignatius Bond..... | Pipeman | 1238 N. California ave. |
| John M. Woelfel..... | Driver..... | 452 Nelson street. |
| William S. Parks..... | Driver..... | 312 Homer street. |

ENGINE COMPANY No. 43.

181 Stave Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|-------------------------|-------------------------|---------------------------|
| August L. Schubert..... | Captain | 785 N. Washtenaw ave. |
| Henry Kaulbach..... | Lieutenant..... | 689 Armitage avenue. |
| Thomas H. Melvin..... | Engineer | 1095 Artesian avenue. |
| Paul F. Jock..... | Assistant Engineer..... | 1131 Maplewood avenue. |
| Edward Jefferson..... | Pipeman..... | 1038 N. Fairfield avenue. |
| John M. Brennan..... | Pipeman..... | 1215 N. Rockwell street. |
| David Cowing..... | Driver..... | 261 Frankfort street. |
| Edward Walsh..... | Driver..... | 52 Shakespeare avenue. |
| Richard E. Lynch..... | Supply Driver..... | 649 Armitage avenue. |

ENGINE COMPANY No. 44.

1494 West Lake Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|-------------------------|-------------------------|-----------------------|
| Michael Sullivan..... | Captain..... | 2005 W. Adams street. |
| William Windle..... | Lieutenant..... | 322 W. Huron street. |
| James C. Syme..... | Engineer..... | 1377 Madison street. |
| Robert A. Freeman..... | Assistant Engineer..... | 134 Richmond street. |
| George H. Fisher..... | Pipeman..... | 915 Warren avenue. |
| Daniel J. Casey..... | Pipeman..... | 1533 W. Lake street. |
| Patrick J. McGrath..... | Pipeman..... | 278 W. Lake street. |
| George H. Wheeler..... | Driver..... | 1531 Carroll avenue. |
| Robert J. Hamilton..... | Driver..... | 1305 Wilcox avenue. |

ENGINE COMPANY No. 45.

4600 Cottage Grove Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|---------------------------|-------------------------|----------------------------|
| Theodore Nelson..... | Captain..... | 4606 Evans avenue. |
| James J. Murphy..... | Lieutenant..... | 399 E. Forty-sixth street. |
| John W. Elliott..... | Engineer..... | 505 Forty-fifth street. |
| John E. Hutchinson..... | Assistant Engineer..... | 717 E. Fifty-seventh st. |
| Edward Danis..... | Pipeman..... | 463 Forty-seventh street. |
| Edward Kugelman..... | Pipeman..... | 4929 Cottage Grove ave. |
| William J. O'Donnell..... | Driver..... | 393 Forty-sixth street. |
| John F. Spoor..... | Driver..... | 403 Forty-sixth street. |

ENGINE COMPANY No. 46.

9321-9323 South Chicago Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|---------------------------|-------------------------|-----------------------|
| Timothy Callahan | Captain | 9008 Houston avenue. |
| Hugh M. Murray..... | Lieutenant..... | 8914 Escanaba avenue. |
| Frederick W. Jones..... | Engineer | 9214 Houston avenue. |
| Albert T. Goodwillie..... | Assistant Engineer..... | 9316 Anthony avenue. |
| John Staskiewicz | Pipeman..... | 8438 Exchange avenue. |
| Henry Meyer..... | Pipeman..... | 854 Division street. |
| Peter Sink | Pipeman..... | 5934 Dearborn street. |
| Henry Dreyer..... | Driver..... | 9630 Exchange avenue. |

ENGINE COMPANY No. 47.

Dobson Avenue and Kedder Court.

| MEMBERS. | POSITION. | RESIDENCE. |
|--------------------------|-------------------------|------------------------|
| Martin Mergenthaler..... | Captain..... | 7723 Dobson avenue. |
| Richard J. Kennedy..... | Lieutenant..... | 7308 Greenwood avenue. |
| Frank A. Biehn..... | Engineer | 7314 Lexington avenue. |
| Patrick J. Keenan | Assistant Engineer..... | 7345 Lexington avenue. |
| Gerrit Shipperus..... | Pipeman..... | 7634 Drexel avenue. |
| Thomas H. Finnegan..... | Pipeman..... | 3145 Parnell avenue. |
| Alfred J. Casson | Driver..... | 7521 Ellis avenue. |
| John J. Gever.... | Driver..... | 266 Washburne avenue. |

ENGINE COMPANY No. 48.

4005 Dearborn Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|---------------------------|-------------------------|--------------------------|
| Patrick E. Collins..... | Captain..... | 4514 Wabash avenue. |
| Frank A. Grady..... | Lieutenant..... | 4123 Wentworth avenue. |
| Michael J. Collins..... | Engineer | 3701 Vincennes avenue. |
| Patrick F. Mulcahy..... | Assistant Engineer..... | 4152 Wentworth avenue. |
| Martin Studenroth..... | Pipeman..... | 4601 Dearborn street. |
| Thomas McNally..... | Pipeman..... | 4516 State street. |
| Martin T. Hogan..... | Pipeman..... | 5831 Wabash avenue. |
| Ernest F. Klatt..... | Driver..... | 4005 Dearborn street. |
| Christopher R. Johnson... | Driver..... | 4014 Dearborn street. |
| Theodore H. Patz..... | Driver..... | 515 Thirty-ninth street. |

ENGINE COMPANY No. 49.

Forty-seventh, between Paulina Street and Marshfield Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|------------------------|-------------------------|-------------------------|
| John J. Hennessy..... | Captain | 4644 Marshfield avenue. |
| Bernard McDonough..... | Lieutenant..... | 4832 S. Ashland avenue. |
| Charles J. Rowe..... | Engineer | 4540 Albany avenue. |
| Paul Drews..... | Assistant Engineer..... | 4814 Ashland avenue. |
| Matthew Gaule..... | Pipeman..... | 5338 Aberdeen street. |
| August R. Martin..... | Pipeman..... | 1623 Forty-seventh st. |
| August Mesbauer..... | Driver..... | 4614 Marshfield avenue. |
| Michael Molloy..... | Driver..... | 635 Forty-first street. |

ENGINE COMPANY No. 50.

4659 Wentworth Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|---------------------------|-------------------------|------------------------|
| William H. Miller..... | Captain | 6328 Greenwood avenue. |
| George W. Bogan..... | Lieutenant | 5141 Emerald avenue. |
| Charles Cooney..... | Engineer | 4944 Dearborn street. |
| John A. Ring..... | Assistant Engineer..... | 4503 Wabash avenue. |
| William Barbour..... | Pipeman..... | 634 Duncan park. |
| Russell G. Peterson | Pipeman..... | 82 Gilpin place. |
| Henry S. McAuley..... | Driver..... | 4734 Wentworth avenue. |
| James M. Walsh..... | Driver..... | 4659 Wentworth avenue. |
| Charles Cherney | Supply Driver..... | 5034 Atlantic street. |

ENGINE COMPANY No. 51.

6345 Wentworth Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|--------------------------|-------------------------|------------------------------|
| Michael McKiernan | Captain | 5623 Elizabeth street. |
| William W. Wright | Lieutenant | 5749 Armour avenue. |
| Thomas Simon | Engineer | 6316 Morgan street. |
| Charles S. Reynolds..... | Assistant Engineer..... | 251 W. Fifty-seventh street. |
| Michael R. Keating..... | Pipeman..... | 242 Sixty-sixth street. |
| Robert C. Palmer | Pipeman..... | 6628 Laflin street. |
| Patrick J. Deasy..... | Pipeman | 6247 State street. |
| John R. Hoerger | Pipeman | 241 Fifty-ninth street. |
| Alexander Cole..... | Driver..... | 421 Fifty-eighth street. |
| Henry F. Weydert..... | Driver..... | 440 Sixtieth street. |
| Max Nisle | Watchman | 10837 Avenue K. |

ENGINE COMPANY No. 52.

Forty-sixth Street and Centre Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|--------------------------|-------------------------|---------------------------------|
| Michael McCabe..... | Captain | 543 Duncan Park. |
| Peter J. McDonough | Lieutenant..... | 4721 Tracey avenue. |
| Rolla W. Covell..... | Engineer | Forty-sixth st. and Centre ave. |
| Thomas Dennison..... | Assistant Engineer..... | 1043 Fifty-third street. |
| Patrick Coogan..... | Pipeman..... | 923 Fifty-first street. |
| Joseph P. Butler | Pipeman..... | 5141 May street. |
| Charles G. Peterson..... | Pipeman..... | 5245 Princeton avenue. |
| William J. Clark..... | Driver..... | 4750 Centre avenue. |
| James O'Callaghan | Driver..... | 112 Twenty-fifth place. |

ENGINE COMPANY No. 53.

Fortieth Street and Packers Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|--------------------------|-------------------------|---------------------------|
| Thomas Elliott..... | Captain | 640 Root street. |
| John Crotty..... | Lieutenant..... | 3809 Lowe avenue. |
| Patrick McCarthy..... | Engineer | 1377 Thirty-third street. |
| Simon S. Freeman | Assistant Engineer..... | 1390 Thirty-fifth street. |
| Alonzo J. Frank..... | Pipeman..... | 6213 Hermitage avenue. |
| Michael J. Donohue | Pipeman..... | 626 Forty-first street. |
| John Ennis..... | Pipeman..... | 5403 Morgan street. |
| Michael J. Doyle | Driver..... | 749 Gordon street. |
| Thomas Leary..... | Driver..... | 1327 Thirty-third street. |

ENGINE COMPANY No. 54.

8023 Vincennes Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|--------------------------|--------------------------|-------------------------|
| John J. Prendergast..... | Captain | 8012 Vincennes avenue. |
| George Rieg | Lieutenant..... | 7828 Stewart avenue. |
| Matthew H. Smith | Engineer | 199 E. Fortieth street. |
| Joseph J. Cooney..... | Assistant Engineer | 7812 Stewart avenue. |
| Nicholas Kassman..... | Pipeman..... | 8004 Vincennes avenue. |
| William E. Kurth..... | Pipeman..... | 7938 Union avenue. |
| Gustave Dreblow..... | Driver..... | 8039 Vincennes avenue. |
| James O'Reily | Driver..... | 8011 Vincennes avenue. |

ENGINE COMPANY No. 55.

687 Sheffield Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|---------------------------|-------------------------|--------------------------|
| Charles A. Tiedemann.... | Captain | 781 Burling street. |
| Matthew Geis..... | Lieutenant..... | 1210 Lincoln avenue. |
| Charles W. Hopkins..... | Engineer | 245 Mohawk street. |
| Alexander M. Richey | Assistant Engineer..... | 950 Osgood street. |
| Frank Oswald..... | Pipeman..... | 887 Seminary avenue. |
| Albert J. McCarthy..... | Pipeman..... | 16 Best avenue. |
| Matthew J. Werdell..... | Pipeman..... | 1039 Nelson street. |
| Frank R. Beesley..... | Driver..... | 1613 N. Clark street. |
| Henry Lincoln..... | Driver..... | 618 Seminary avenue. |
| Timothy Clifford..... | Supply Driver..... | 1316 Diversey boulevard. |

ENGINE COMPANY No. 56.

144 Noble Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|--------------------------------|------------------------------|-------------------------|
| Casper A. Charleston | Captain | 1307 Wellington avenue. |
| John Franzen | Lieutenant | 439 Warner avenue. |
| Charles Bloom | Engineer | 1452 Wellington avenue. |
| Martin C. Morf | Assistant Engineer | 119 Belmont avenue. |
| William Fries | Pipeman | 1132 George street. |
| John P. Hanrahan | Pipeman | 667 Austin avenue. |
| Adam Breit | Driver | 1302 Wolfram street. |
| Albert C. Gehrke | Driver | 136 Noble avenue. |
| Joseph Dibos | Watchman | 1893 N. Ashland avenue. |

ENGINE COMPANY No. 57.

543 Jane Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|------------------------------|------------------------------|-------------------------------|
| William Carey | Captain | 757 N. Western avenue. |
| Patrick J. Brosnan | Lieutenant | 188 N. Marshfield ave. |
| John Prussel | Engineer | 452 Cornelia street. |
| Joseph I. Newett | Assistant Engineer | 1797 W. Twenty-second street. |
| John Morton | Pipeman | 138 Crystal street. |
| Samuel Kugelman | Pipeman | 558 Jane street. |
| Herman Reich | Driver | 663 N. Western avenue. |
| Julius Riedell | Driver | 657 W. Division street. |

ENGINE COMPANY No. 58.

Fire-boat Chicago.

East Approach of Ninety-fifth Street Bridge.

| MEMBERS. | POSITION. | RESIDENCE. |
|----------------------------|---------------|-------------------------|
| William J. Sweeney..... | Captain..... | 6851 Yale street. |
| Frank B. Hutchinson | Engineer..... | 6313 Evans avenue. |
| Robert Reid | Engineer..... | Company quarters. |
| Hugh McGowan..... | Stoker..... | Company quarters. |
| Philip Garrity..... | Stoker..... | Company quarters. |
| John W. Nolan..... | Pilot..... | Company quarters. |
| Cornelius J. Hallahan..... | Pilot..... | 9747 Avenue L. |
| John L. Stark..... | Pipeman..... | 10022 Avenue J. |
| Bernard R. Brady | Pipeman..... | 3336 S. Ashland avenue. |

ENGINE COMPANY No. 59.

Corner Broadway and Dexter Park Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|--------------------------|-------------------------|--------------------------|
| Thomas Kenney..... | Captain | 4613 Emerald avenue. |
| James McGraw..... | Lieutenant..... | 716 Gordon street. |
| Charles F. Swenie | Engineer | 724 Gordon street. |
| Edward Walsh | Assistant Engineer..... | Company quarters. |
| Frank W. Walters..... | Pipeman..... | 3312 S. Halsted street. |
| James S. Hickey..... | Pipeman..... | 730 Gordon street. |
| Frederick Hoeger... .. | Driver..... | 4021 Wallace street. |
| Maurice B. Moloney | Driver..... | 622 Fifty-seventh place. |

ENGINE COMPANY No. 60.

334 Fifty-fifth Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|-------------------------|-------------------------|----------------------------|
| John Clingen..... | Captain..... | 578 Fifty-fifth street. |
| Sylvester Leser..... | Lieutenant..... | 696 Jackson boulevard. |
| Silas H. Wolfe..... | Engineer..... | 5558 Lexington avenue. |
| John P. Wachter..... | Assistant Engineer..... | 453 Fifty-fifth street. |
| Patrick J. Kelly..... | Pipeman | 4832 Wentworth avenue. |
| William T. Donohue..... | Pipeman..... | 214 E. Fifty-fifth street. |
| Edward J. Pidgeon..... | Pipeman..... | 2299 W. Van Buren st. |
| Bertram D. Fort..... | Driver | 295 Fifty-fifth street. |

ENGINE COMPANY No. 61.

5300 Wentworth Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|------------------------|-------------------------|-------------------------|
| James J. Tobin..... | Captain..... | 5342 Atlantic street. |
| Martin J. Curley..... | Lieutenant..... | 3415 Ashland avenue. |
| Joseph X. Hoerger..... | Engineer..... | 5269 Dearborn street. |
| William Kaiser..... | Assistant Engineer..... | 319 Fifty-third street. |
| Frank W. Stoltz | Pipeman..... | 627 Englewood avenue. |
| Max A. Vollman..... | Pipeman..... | 5138 Atlantic street. |
| Maurice O'Connor..... | Driver..... | 5443 Armour avenue. |
| Thomas C. Wren..... | Driver..... | 5615 La Salle street. |

ENGINE COMPANY No. 62.

11450 Michigan Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|-------------------------|-------------------------|------------------------|
| John J. O'Neill..... | Captain | 11450 Michigan avenue. |
| John J. O'Donnell..... | Lieutenant..... | 2612 113th place. |
| John Becker..... | Engineer..... | 116 114th street. |
| John H. Coyle | Assistant Engineer..... | 2534 115th street. |
| Herman G. Brandenburg.. | Pipeman..... | 2630 112th street. |
| Henry A. McDonald..... | Pipeman..... | 2608 115th street. |
| William F. Brown..... | Driver..... | 2608 113th place. |
| Henry A. Johnson..... | Driver..... | 2608 113th street. |

ENGINE COMPANY No. 63.

6328-6330 Maryland Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|--------------------------|-------------------------|-------------------------|
| Lewis Fiene | Captain..... | 6011 State street. |
| Frank Skopec..... | Lieutenant..... | 6453 Ingleside avenue.} |
| Conrad Liesegang | Engineer..... | 6330 Maryland avenue. |
| Bernard D. McShane | Assistant Engineer..... | 6350 Langley avenue. |
| William J. Welch..... | Pipeman..... | 6440 Langley avenue. |
| Joseph J. Power..... | Pipeman..... | 6313 Drexel avenue. |
| Victor F. Rofinot..... | Driver..... | 6354 Langley avenue. |
| Frederick Wise..... | Driver..... | 6313 Champlain avenue. |

ENGINE COMPANY No. 64.

6244 Laflin Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|---------------------------|-------------------------|--------------------------|
| Frank H. Butterfield..... | Captain..... | 6316 Laflin street. |
| Dennis A. Moss..... | Lieutenant..... | 6528 Laflin street. |
| John Dawson..... | Engineer..... | 1257 Sixty-third street. |
| Edward S. Jennings..... | Assistant Engineer..... | 4 Corwin place. |
| Peter J. Butler..... | Pipeman..... | 6438 Marshfield avenue. |
| John J. Garrick..... | Pipeman..... | 1209 Sixty-third street. |
| John A. Sadey..... | Driver..... | 6354 Bishop street. |
| Winfield S. White..... | Driver..... | 1229 Stone avenue. |

ENGINE COMPANY No. 65.

2140 West Thirty-ninth Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|-------------------------|-------------------------|--------------------------|
| George T. Foley..... | Captain..... | 2018 Thirty-eighth st. |
| Michael Clark..... | Lieutenant..... | 3814 S. Union avenue. |
| William H. Scanlon..... | Engineer..... | 3704 Emerald avenue. |
| John C. Hartford..... | Assistant Engineer..... | 3609 Leavitt street. |
| David Scanlon..... | Pipeman..... | 3862 Archer avenue. |
| Patrick H. Sweeney..... | Pipeman..... | 2038 Thirty-eighth st. |
| Michael J. Lahey..... | Driver..... | 2642 Thirty-ninth place. |
| Joseph Collins..... | Driver..... | 191 Curtis street. |

ENGINE COMPANY No. 66.

1423 Fillmore Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|------------------------|--------------------------|--------------------------|
| Patrick W. Murphy..... | Captain..... | 1363 W. Harrison street. |
| Joseph Lillig..... | Lieutenant..... | 755 W. Twelfth street. |
| Louis Palmer..... | Engineer..... | 1483 W. Twelfth street. |
| Frank Smith..... | Assistant Engineer. | 525 Sacramento avenue. |
| Charles J. Allen..... | Pipeman..... | 1655 Grenshaw street. |
| George J. Barker..... | Pipeman..... | 1389 Harvard street. |
| Michael Reidy..... | Driver..... | 524 Albany avenue. |
| David A. Walsh..... | Driver..... | 700 California avenue. |

ENGINE COMPANY No. 67.

2436 Fulton Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|-------------------------|-------------------------|--------------------------|
| Paul Ditt..... | Captain..... | 985 Walnut street. |
| Charles E. Houston..... | Engineer..... | 1855 Park avenue. |
| Dennis J. Foley..... | Assistant Engineer..... | 2191 W. Kinzie street. |
| Charles Thompson..... | Pipeman..... | 2488 W. Superior street. |
| Reynold H. Rueschaw.... | Pipeman..... | 2421 Fulton street. |
| Adames Hutchinson..... | Driver..... | 1855 Park avenue. |
| John McEllin..... | Driver..... | 2039 Wilcox avenue. |

ENGINE COMPANY No. 68.

W. Forty-fourth Street, between North and Wabansia Avenues.

| MEMBERS. | POSITION. | RESIDENCE. |
|-------------------------|-------------------------|---------------------------------|
| Peter J. Vogt..... | Captain..... | 912 N. Forty-second ave. |
| George W. Albrecht..... | Lieutenant..... | 1024 N. Forty-first court. |
| James Lundy..... | Engineer..... | 940 Tripp avenue. |
| Richard McElligott..... | Assistant Engineer..... | 1733 W. North avenue. |
| John H. Lang..... | Pipeman..... | 882 N. Forty-first court. |
| William A. Wright | Pipeman..... | 1036 North Forty-second avenue. |
| James Moran..... | Driver..... | 905 N. Forty-second ave. |
| Patrick J. Smith..... | Driver..... | 816 Holt avenue. |

ENGINE COMPANY No. 69.

2458 Selwyn Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|---------------------------|-------------------------|----------------------------|
| William E. Hand..... | Captain..... | 1114 Grace street. |
| Charles R. Potthoff | Lieutenant..... | 2409 Crawford avenue. |
| George D. Hahn..... | Engineer..... | 2537 N. Lombard avenue. |
| Alexander Nathanson | Assistant Engineer..... | 353 W. North avenue. |
| Louis W. Grosskopf..... | Pipeman..... | 2315 N. Forty-fourth ct. |
| Joseph E. Deitz..... | Driver..... | 2381 N. Forty-first court. |

ENGINE COMPANY No. 70.

316 Eastwood Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|----------------------|-------------------------|-------------------------|
| Peter Lawson. | Captain.... | 283 Eastwood avenue. |
| Peter Minwegen..... | Lieutenant..... | 1405 Osgood street. |
| Louis A. Warne..... | Engineer..... | 453 Belleplaine avenue. |
| Jacob Weisen..... | Assistant Engineer..... | 153 W. Chicago avenue. |
| Michael Kennedy..... | Pipeman | 1225 Eddie street. |
| John C. Marloff..... | Driver..... | 231 Eastwood avenue. |

ENGINE COMPANY No. 71.

Fire-boat Fire Queen.

489-491 N. Branch Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|--------------------------|-------------------------|------------------------|
| William J. Burroughs.... | Captain..... | 91 Seminary avenue. |
| John Greulich..... | Lieutenant | 167 Sheffield avenue. |
| William Kearney..... | Engineer..... | 110 Fremont street. |
| Roud O. Blodgett..... | Assistant Engineer..... | 46 Racine avenue. |
| John R. Owens..... | Stoker..... | 240 Sheffield avenue. |
| Edward M. Lendabarker .. | Stoker..... | 195 Sheffield avenue. |
| Lewis A. Brockway..... | Pilot..... | 50 Clifton avenue. |
| Charles A. Hansen... .. | Pilot..... | 759 N. Paulina street. |
| Henry Thies | Pipeman..... | 115 Sheffield avenue. |

ENGINE COMPANY No. 72.

7914 Duncan Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|-------------------------------|------------------------------|-----------------------|
| John Gillespie | Captain | 8005 Duncan avenue. |
| Robert Ambrose | Lieutenant | 7920 Duncan avenue. |
| Hugh M. Topping | Engineer | 6313 Evans avenue. |
| Frank J. Montague | Assistant Engineer | 7927 Reynolds avenue. |
| Robert H. Drew | Pipeman | 7933 Reynolds avenue. |
| Herbert E. Robinson | Driver | 8027 Reynolds avenue. |

ENGINE COMPANY No. 73.

8630 Emerald Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|------------------------------|------------------------------|--------------------------------|
| James A. Carnes | Captain | 1016 W. Eighty-seventh street. |
| James McLaughlin | Lieutenant | 8630 Desplaines street. |
| George F. Struckel | Engineer | 8692 Vincennes avenue. |
| Matthew J. Conway | Assistant Engineer | 8630 Emerald avenue. |
| Howard H. Schriver | Pipeman | 7152 S. Chicago avenue. |
| Frank H. McKenna | Driver | 8433 Union avenue. |

ENGINE COMPANY No. 74.

One Hundred Sixth Street and Avenue K.

| MEMBERS. | POSITION. | RESIDENCE. |
|------------------------------|------------------------------|------------------------|
| Nicholas J. Powers | Captain | 10503 Avenue K. |
| Cornelius B. Ryan | Lieutenant | 4801 Wabash avenue. |
| Axel G. Engwall | Engineer | 10052 Avenue L. |
| William H. Reed | Assistant Engineer | 10116 Avenue K. |
| Frank Bielenberg | Pipeman | 10553 Avenue L. |
| John Helfert | Driver | 1863 Ninety-second st. |

ENGINE COMPANY No. 75.

N. W. Corner One Hundred Twenty-first and Desplaines Streets.

| MEMBERS. | POSITION. | RESIDENCE. |
|---------------------------|--------------------------|-----------------------|
| Charles N. Heaney | Captain | 12018 Wallace avenue. |
| James E. Murphy | Lieutenant | 12039 Wallace avenue. |
| Frank Whalen | Engineer | 11934 Union avenue. |
| Cornelius Sheehan | Assistant Engineer | 11910 Union avenue. |
| Gottfried Hackenbrock ... | Pipeman | 11910 Union avenue. |
| Daniel A. Hedglin | Driver | 11920 Clinton street. |

ENGINE COMPANY No. 76.

824 Cortland Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|--------------------------|--------------------------|---------------------------|
| Paul F. A. Pundt | Captain | 592 Cortland street. |
| Albert Nelson | Lieutenant | 790 N. Winchester ave. |
| John T. Farrell | Engineer | 726 N. Oakley avenue. |
| James Stackpole | Assistant Engineer | 1055 Hancock avenue. |
| Charles J. Bentzen | Pipeman | 1049 N. Central Park ave. |
| Frank H. Fisher | Driver | 1120 Armitage avenue. |

ENGINE COMPANY No. 77.

1222 W. Fortieth Court.

| MEMBERS. | POSITION. | RESIDENCE. |
|-------------------------|--------------------------|--------------------------|
| John Sullivan | Captain | 2068 Grenshaw street. |
| John McCarthy | Lieutenant | 1255 W. Forty-first ave. |
| William J. Wilson | Engineer | 596 Turner avenue. |
| John F. Kevil | Assistant Engineer | 291 S. Paulina street. |
| John Beroinek | Pipeman | 1438 W. Fortieth court. |
| John Murphy | Driver | 1217 W. Forty-first ave. |

ENGINE COMPANY No. 78.

1306 Waveland Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|-------------------------|-------------------------|-----------------------|
| George B. Miller | Captain | 1307 Grace street. |
| Edward Berger..... | Lieutenant..... | 1027 Seminary avenue. |
| Charles Kilgallen..... | Engineer | 1120 Melrose street. |
| John F. Nihon | Assistant Engineer..... | 864 Irving Park blvd. |
| George Ermitinger | Pipeman..... | 849 Racine avenue. |
| Frank J. Summers.. .. | Driver..... | 1306 Cornelia street. |

ENGINE COMPANY No. 79.

3179 N. Ashland Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|-----------------------|--------------------------|-------------------------|
| John G. Carlson..... | Captain | 722 Winona street. |
| William L. Mayer..... | Lieutenant | 3139 N. Ashland ave. |
| James Colford..... | Engineer..... | 1663 Barry avenue. |
| Frederick Reudel..... | Engineer | 418 Larrabee street. |
| August Wurthman..... | Assistant Engineer | 2930 N. Ashland avenue. |
| John O. Johnson... .. | Assistant Engineer | 663 Haddon avenue. |
| Edward E. Varges..... | Pipeman..... | 739 Balmoral avenue. |
| Charles Martin | Driver..... | 745 Foster avenue. |

ENGINE COMPANY No. 80.

One Hundred Eighth and Stephenson Streets, Pullman.

| MEMBERS. | POSITION. | RESIDENCE. |
|--------------------------|--------------------------|--------------------------|
| Thomas A. Corcoran | Captain | 2525 111th street. |
| Matthias J. Koch | Lieutenant | 10846 Michigan avenue. |
| Joseph Engelthaler | Engineer | 287 W. Twentieth street. |
| James Cummings | Assistant Engineer | 913 Grand avenue. |
| Thomas O'Donnell | Pipeman | 111 Stephenson street. |
| Frank L. Hausher | Pipeman | 11045 Michigan avenue. |
| Hans Malmberg | Driver | 23 Twenty-fourth place. |
| Patrick J. Ford | Driver | 1113 Jefferson street. |

ENGINE COMPANY No. 81.

N. W. Corner One Hundred Fifth Street and Hoxie Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|-------------------------|--------------------------|---------------------------|
| Thomas P. Barry | Captain | 326 Twenty-fourth street. |
| John Cranby | Lieutenant | 10451 Hoxie avenue. |
| Jorgen Jensen | Engineer | 326 N. Franklin street. |
| Ira J. Hackett | Assistant Engineer | 5201 Lake avenue. |
| Joseph Wiedemeyer | Pipeman | 10455 Hoxie avenue. |
| Patrick Burke | Pipeman | 469 Ninety-fifth street. |

HOOK AND LADDER COMPANY No. 1.

84 Pacific Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|------------------------|-----------------|--------------------------|
| Helmer Hermanson..... | Captain..... | 1028 School street. |
| Edward Michaelis | Lieutenant..... | 835 Perry street. |
| John E. Donlon..... | Truckman | 185 N. Ashland avenue. |
| John F. Kelly..... | Truckman | 84 Pacific avenue. |
| Joseph E. McNulty..... | Truckman | 411 W. Fourteenth st. |
| Lawrence Walsh | Truckman | 84 Pacific avenue. |
| Claus Clausen..... | Truckman | 83 Ninety-second street. |
| John Lillig..... | Truckman | 189 Twenty-second place |
| Thomas Giltinan | Truckman | 737 Garfield boulevard. |
| Carl J. Ellfeldt..... | Truckman | 1329 Seventy-fifth st. |
| Martin J. Hickey..... | Driver..... | 24 Charles place. |
| James B. Toohey.... | Driver..... | 199 Forquer street. |

HOOK AND LADDER COMPANY No. 2.

49 West Washington Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|---------------------------|-----------------|----------------------------|
| James Pumphry..... | Captain | 20 S. Throop street. |
| Thomas F. Hackett..... | Lieutenant..... | 59 Warren avenue. |
| John J. Kaefer..... | Truckman | 37 Spruce street. |
| Matthew G. Quinlan..... | Truckman | 359 W. Polk street. |
| Arwed A. Fritchie..... | Truckman | 239 W. Division street. |
| Daniel Callahan..... | Truckman | 184 North Lincoln street. |
| Oscar J. Arbogast..... | Truckman | 1058 Sheffield avenue. |
| Thomas W. Hamilton..... | Truckman | 667 W. Superior street. |
| Daniel Riordon..... | Truckman | 153 N. Peoria street. |
| James Casey | Truckman | 197 E. Erie street. |
| William E. Rooney..... | Driver..... | 31 Sholto street. |
| William F. Ellfeldt | Driver..... | 1329 Seventy-fifth street. |

HOOK AND LADDER COMPANY No. 3. 179 East Erie Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|-------------------------|-----------------|-------------------------|
| Benjamin O'Connor..... | Captain..... | 245 Mohawk street. |
| Thomas J. Reynolds..... | Lieutenant..... | 386 W. Van Buren. |
| John McGovern..... | Truckman..... | 182 Franklin street. |
| Lambert Beck..... | Truckman..... | 128 Orchard street. |
| Patrick Rogers..... | Truckman..... | 179 E. Erie street. |
| Patrick Lyons..... | Truckman..... | 45 Wendell street. |
| Thomas P. Kenney..... | Truckman..... | 212 Curtis street. |
| Patrick Pierce..... | Truckman..... | 25 Goethe street. |
| Michael Roche..... | Truckman..... | 180 La Salle avenue. |
| Charles C. Persons..... | Truckman..... | 308 E. Sixtieth street. |
| John Riley..... | Driver..... | 119 Townsend street. |
| Jacob J. Fleck..... | Driver..... | 32 Maple street. |

HOOK AND LADDER COMPANY No. 4. 322 Twenty-second Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|--------------------------|-----------------|---------------------------|
| James W. Shannessy..... | Captain..... | 2343 Wentworth avenue. |
| Charles Hart..... | Lieutenant..... | 322 Twenty-second st. |
| John Schwickrath..... | Truckman..... | 24 Twenty-fifth place. |
| Daniel H. McConnell..... | Truckman..... | 20 Twenty-fifth place. |
| Daniel Moore..... | Truckman..... | 59 Elburn avenue. |
| George M. Gilmore..... | Truckman..... | 4214 Wentworth avenue. |
| George G. Reilly..... | Truckman..... | 350 Twenty-fourth street. |
| Daniel D. Donohue..... | Truckman..... | 3329 Auburn avenue. |
| Thomas Dillon..... | Truckman..... | 390 S. Morgan street. |
| Patrick J. Lynch..... | Truckman..... | 3729 Emerald avenue. |
| Matthew Hartigan..... | Driver..... | 2701 Portland avenue. |
| John McNealy..... | Driver..... | 3619 Fifth avenue. |

HOOK AND LADDER COMPANY No. 5.

440 West Twelfth Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|--------------------------|-----------------|--------------------------|
| George Baumann..... | Captain..... | 868 N. Irving avenue. |
| Joseph Schott..... | Lieutenant..... | 1119 Blue Island avenue. |
| Henry J. Staats..... | Truckman | 330 Maxwell street. |
| Patrick J. Kenney..... | Truckman | 1068 W. Twelfth street. |
| Patrick F. Moroney | Truckman | 916 W. Twelfth street. |
| Edward J. Miley..... | Truckman | 327 Laflin street. |
| Patrick Patterson..... | Truckman | 746 Hinman street. |
| Joseph H. O'Malley..... | Truckman | 1118 N. Oakley avenue. |
| Frederick N. Hartman.... | Truckman | 2818 Kelly street. |
| William Van Boggett..... | Driver..... | 2806 Emerald avenue. |

HOOK AND LADDER COMPANY No. 6.

85 South Franklin Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|---------------------------|-----------------|--------------------------|
| Thomas O'Connor..... | Captain | 247 S. Halsted street. |
| James Cunningham..... | Lieutenant..... | 1367 W. Congress street. |
| John Tierney..... | Truckman | 85 S. Franklin street. |
| Arthur R. Seyferlich..... | Truckman | 177 N. Paulina street. |
| George H. Thompson..... | Truckman | 7 Walnut street. |
| Patrick Sullivan..... | Truckman | 717 W. Twenty-second st. |
| Luke Hayes..... | Truckman | 549 S. Leavitt street. |
| John G. Bergman..... | Truckman | 188 Milton avenue. |
| Timothy J. Sullivan | Truckman | 85 S. Franklin street. |
| Walter Powers..... | Truckman | 352 Indiana street. |
| Casper Snite..... | Driver..... | 10 N. Union street. |
| Andrew Riley..... | Driver..... | 186 Milwaukee avenue. |

HOOK AND LADDER COMPANY No. 7.

140 North Lincoln Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|---------------------------|-----------------|-------------------------|
| Jacob Grauer..... | Captain. | 743 W. Superior street. |
| Michael S. Kerwin | Lieutenant..... | 575 W. Erie street. |
| Patrick O'Connor..... | Truckman | 337 W. Huron street. |
| Lawrence Hickey..... | Truckman | 88 Emerson avenue. |
| Michael Canty..... | Truckman | 566 W. Erie street. |
| John Pyne | Truckman | 853 Carroll avenue. |
| Christopher Coughlin..... | Truckman | 431 W. Erie street. |
| Jacob Herchenroder..... | Truckman | 111 Emerson avenue. |
| Oscar W. Peterson..... | Truckman | 587 W. Chicago avenue. |
| George W. Greene | Driver..... | 658 Grand avenue. |

HOOK AND LADDER COMPANY No. 8.

2865 Deering Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|---------------------------|-----------------|----------------------|
| David W. Evans..... | Captain..... | 3030 Haines court. |
| Daniel Murphy..... | Lieutenant..... | 103 Fuller street. |
| Timothy F. Murphy..... | Truckman | 3154 Wallace street. |
| Andrew G. Storen..... | Truckman | 2865 Deering street. |
| Patrick E. Donohue..... | Truckman | 2924 Keeley street. |
| Hubert Classen..... | Truckman | 689 S. Union street. |
| John F. Hartnett..... | Truckman | 336 Centre avenue. |
| Thomas J. O'Neil | Truckman | 3045 Deering street. |
| William L. Sullivan | Truckman | 3523 Oakley avenue. |
| George P. Lubben..... | Driver..... | 3012 Farrell street. |

HOOK AND LADDER COMPANY No. 9.

Foot of Monroe Street, Lake Front.

| MEMBERS. | POSITION. | RESIDENCE. |
|------------------------|-----------------|--------------------------|
| William Barker..... | Captain | 24 Nassau street. |
| John J. Sullivan | Lieutenant..... | 302 W. Congress street. |
| Thomas Gallagher..... | Truckman | 46 Sherman street. |
| James E. Miller | Truckman | 237 Mohawk street. |
| John Paschke..... | Truckman | 179 Twenty-fourth place. |
| John J. Mullaney. | Truckman | 47 Pine street. |
| Rudolph Pickert | Truckman | 406 W. Thirteenth st. |
| James J. Meaney | Truckman | 5601 Fifth avenue. |
| James W. Purcell..... | Truckman | 4144 Fifth avenue. |
| Norman M. Daly | Truckman | 1059 N. Central Park av. |
| Carl A. Rapp | Driver..... | 374 N. Franklin street. |
| Arnold R. Morf | Driver..... | 189 Larrabee street. |

HOOK AND LADDER COMPANY No. 10.

409 Larrabee Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|----------------------------|-----------------|------------------------|
| David O'Connell | Captain..... | 72 Mohawk street. |
| Henry F. Wendt..... | Lieutenant..... | 110 Sedgwick street. |
| William H. Pfeffer..... | Truckman | 41 Goethe street. |
| William A. Christianson... | Truckman | 15 Town street. |
| Peter Gies | Truckman | 259 Larrabee street. |
| John P. Stahl..... | Truckman | 293 Larrabee street. |
| Frank W. Greenman..... | Truckman | 409 Larrabee street. |
| James J. Scanlon..... | Truckman | 409 Larrabee street. |
| George F. Fuller..... | Truckman | 679 W. Chicago avenue. |
| George Woelfing..... | Driver..... | 29 Eugenie street. |
| George A. Mooney..... | Driver..... | 565 N. Park avenue. |
| Bernard Smith..... | Watchman | 15 Osborn street. |

HOOK AND LADDER COMPANY No. 11.

451 Thirty-sixth place.

| MEMBERS. | POSITION. | RESIDENCE. |
|------------------------|-----------------|----------------------------|
| John W. Powers..... | Captain..... | 3355 Prairie avenue. |
| Matthias Meyer..... | Lieutenant..... | 3510 Wentworth avenue. |
| Daniel Buckley..... | Truckman..... | 2961 Wentworth avenue. |
| Andrew O'Day..... | Truckman..... | 3223 Wentworth avenue. |
| Henry W. Lange..... | Truckman..... | 2634 Wabash avenue. |
| Patrick Ahern..... | Truckman..... | 3516 Forest avenue. |
| Otto J. Mueller..... | Truckman..... | 9234 Cottage Grove avenue. |
| John D. Cavanaugh..... | Truckman..... | 4559 Wabash avenue. |
| Anton Kercher..... | Truckman..... | 1927 Wabash avenue. |
| Patrick J. Toomey..... | Driver..... | 3550 Fifth avenue. |
| Michael J. Hurley..... | Driver..... | 3445 Emerald avenue. |

HOOK AND LADDER COMPANY No. 12.

1245 West Thirteenth Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|-------------------------|-----------------|------------------------------|
| Henry C. Schroeder..... | Captain..... | 848 W. Twenty-second street. |
| James R. Feeney..... | Lieutenant..... | 171 Washburne avenue. |
| Joseph H. Barker..... | Truckman..... | 1156 W. Twelfth street. |
| Thomas W. Filek..... | Truckman..... | 521 Oakley avenue. |
| John S. Sullivan..... | Truckman..... | 1245 W. Thirteenth st. |
| William E. Wren..... | Truckman..... | 588 Washburne avenue. |
| Michael D. Connors..... | Truckman..... | 1247 W. Fifteenth street. |
| Cornelius Ryan..... | Truckman..... | 349 Blue Island avenue. |
| Thomas Quan..... | Truckman..... | 1245 W. Thirteenth st. |
| John S. Smith..... | Driver..... | 272 S. Morgan street. |

HOOK AND LADDER COMPANY No. 13.

1549 North Rockwell Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|-----------------------|-----------------|--------------------------|
| John Tangney..... | Captain | 1341 N. Rockwell st.. |
| Denis Laughlin..... | Lieutenant..... | 270 N. Kedzie avenue. |
| Charles Foreman..... | Truckman | 8 Crosby street. |
| William R. Taube..... | Truckman | 1347 N. Washtenaw ave. |
| Eugene Burke..... | Truckman | 1069 Elston avenue. |
| Otto Truhls..... | Truckman | 913 Dania avenue. |
| Frank Kopeske..... | Truckman | 417 Fullerton avenue. |
| Henry A. Michels..... | Driver..... | 1395 N. Rockwell street. |

HOOK AND LADDER COMPANY No. 14.

80 West Nineteenth Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|---------------------------|-----------------|--------------------------|
| George T. Marks..... | Captain | 902 S. Ashland avenue. |
| John C. Windheim..... | Lieutenant..... | 658 W. Twentieth street. |
| Florence M. McAuliffe.... | Truckman | 811 S. Halsted street. |
| Daniel McNamara..... | Truckman | 48 Eighteenth place. |
| John Gambon..... | Truckman | 659 W. Twentieth street. |
| James Maddigan..... | Truckman | 46 Eighteenth place. |
| William J. McCullum..... | Truckman | 330 S. Peoria street. |
| Thomas McManmon.... | Truckman | 12 Evans court. |
| James Donovan..... | Truckman..... | 662 W. Twentieth street. |
| George J. Miller..... | Driver..... | 748 S. Jefferson street. |
| James J. Moran..... | Driver..... | 51 Waller street. |

HOOK AND LADDER COMPANY No. 15.

4602 Cottage Grove Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|--------------------------|--------------------|--------------------------|
| Theodore Nelson | Captain..... | 4606 Evans avenue. |
| Andrew Dwyer..... | Truckman | 717 E. Fifty-seventh st. |
| Robert C. Hartley..... | Truckman | 83 E. Ninetieth street. |
| Charles H. Tompkins..... | Truckman .. | 4600 Cottage Grove ave. |
| John H. Miller..... | Truckman | 5657 Cottage Grove ave. |
| David West..... | Truckman | 4559 Evans avenue. |
| James T. Tobin | Truckman | 531 Fiftieth court. |
| Oscar Kleiner | Driver..... | 4617 Langley avenue. |
| Andrew S. Gilso..... | Supply Driver..... | 4623 Evans avenue. |

HOOK AND LADDER COMPANY No. 16.

Madison Avenue and Sixty-second Court.

| MEMBERS. | POSITION. | RESIDENCE. |
|-------------------------|----------------|----------------------------|
| Frederick Goetz..... | Captain | 6406 St. Lawrence ave. |
| Patrick H. Howard | Lieutenant.. | 6328 St. Lawrence ave. |
| John Dedmond..... | Truckman | 6512 Langley avenue. |
| Henry J. Fuchs..... | Truckman | 315 E. Sixty-third street. |
| John Kelly..... | Truckman | 6511 Evans avenue. |
| Frederick Nichol | Truckman | 6409 St. Lawrence ave. |
| Harry C. Hartman..... | Truckman..... | 6447 Langley avenue. |
| John A. Strom..... | Driver..... | 1403 Diversey avenue. |

HOOK AND LADDER COMPANY No. 17.

9321-9323 South Chicago Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|-------------------------|----------------|----------------------------------|
| Timothy Callahan..... | Captain | 9008 Houston avenue. |
| William A. Colford..... | Truckman | 8911 Exchange avenue. |
| Michael Crotty | Truckman | 419 Ninety-third street. |
| James Costin..... | Truckman | 2424 Sanger street. |
| Charles Rippe | Truckman | 136th street and Indiana avenue. |
| William S. O'Brien..... | Truckman | 13432 S. Chicago avenue. |
| James J. McCooley..... | Truckman | 352 Ninety-first street. |
| Arthur Pedersen..... | Truckman | 9120 Mackinaw avenue. |
| Edward E. Carey..... | Driver..... | 9321 S. Chicago avenue. |

HOOK AND LADDER COMPANY No. 18.

4730 South Halsted Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|--------------------------|------------------|--------------------------|
| Owen L. White..... | Captain | 803 Garfield blvd. |
| James Burke | Lieutenant... .. | 5325 Dearborn street. |
| Michael J. Doyle..... | Truckman | 5359 Carpenter street. |
| John J. Murnane..... | Truckman | 839 Forty-eighth street. |
| Edward P. Dick..... | Truckman | 5539 Princeton avenue. |
| John Savage | Truckman | 843 Forty-eighth street. |
| Henry Wingle | Truckman | 709 Mattison street. |
| Frank Haubenreiser..... | Truckman | 1049 Fifty-first street. |
| Olaf Swanson | Truckman | 4953 Halsted street. |
| Francis E. Sullivan..... | Driver..... | 4825 Halsted street. |

HOOK AND LADDER COMPANY No. 19.

237 West Chicago Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|----------------------------|------------------|-------------------------|
| John F. O'Malley | Captain | 602 W. Huron street. |
| Daniel H. Flynn | Lieutenant | 633 W. Erie street. |
| John Thrane | Truckman | 247 W. Chicago avenue. |
| Charles J. Tews | Truckman | 587 W. Chicago avenue. |
| William F. Tierney | Truckman | 223 N. Ashland avenue. |
| Andrew Przenizkowski | Truckman | 29 Cornelia street. |
| Thomas P. Mulcahey | Truckman | 795 Holt avenue. |
| Jonathan Cullen | Truckman | 1178 N. Claremont av. |
| Andrew Amundson | Truckman | 121 Rice street. |
| John Sowka | Truckman | 20 Chapin street. |
| John Hussey | Driver | 25 Bickerdike street. |
| Albert Warneke | Driver | 202 N. Townsend street. |
| Charles Miller | Watchman | 468 Garfield avenue. |

HOOK AND LADDER COMPANY No. 20.

550 Sixty-ninth Street.

| MEMBERS. | POSITION. | RESIDENCE. |
|---------------------------|------------------|-------------------------|
| George W. Weller | Captain | 6832 Lafayette avenue. |
| Michael T. McNamara | Lieutenant | 751 Sixty-ninth street. |
| James F. Maher | Truckman | 7015 Honore street. |
| Edward H. McCormick | Truckman | 7026 Union avenue. |
| Thomas J. Honors | Truckman | 6835 Green street. |
| Joseph T. Ballak | Truckman | 6945 Centre avenue. |
| Dennis J. Bremer | Truckman | 6923 Wright street. |
| John Hallburg | Driver | 7300 Stewart avenue. |

HOOK AND LADDER COMPANY No. 21.

827 Belmont Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|--------------------------|-----------------|-------------------------|
| August C. Seeger..... | Captain | 987 Herndon street. |
| Charles O. Peterson..... | Lieutenant..... | 658 Otto street. |
| William Reling..... | Truckman | 626 Racine avenue. |
| Patrick Savage | Truckman | 309 Belleplaine avenue. |
| Peter Stainbrook | Truckman | 826 Racine avenue. |
| William Koepke..... | Truckman | 389 Wells street. |
| Arthur Leveck..... | Truckman | 775 Southport avenue. |
| Joseph A. Rein.... | Driver | 1067 Argyle street. |
| Diedrich L. Grote | Watchman..... | 2324 Bernard avenue. |

HOOK AND LADDER COMPANY No. 22.

North Fifty-ninth Street and Lincoln Avenue (Bowmanville).

| MEMBERS. | POSITION. | RESIDENCE. |
|--------------------------|-----------------|--------------------------|
| Richard Ryan..... | Lieutenant..... | 2309 N. Western avenue. |
| Christopher Nichol | Truckman | Company quarters. |
| Andrew Nelson..... | Truckman | Lincoln and Winona aves. |
| Andrew J. Carlson..... | Driver... .. | Company quarters. |

HOOK AND LADDER COMPANY No. 23.

Short and Our Streets (Jefferson Park).

| MEMBERS. | POSITION. | RESIDENCE. |
|-----------------------|-----------------|----------------------------|
| William Bomhake | Lieutenant..... | Dwight st., Jefferson P'k. |
| Peter Curren..... | Truckman | Lawrence avenue, J. Pk. |
| Berger Habel..... | Driver..... | Lawrence avenue, J. Pk. |

HOOK AND LADDER COMPANY No. 24.

S. W. Corner One Hundred Fourth Street and Vincennes Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|------------------------|-----------------|------------------------|
| Henry F. Huhn..... | Lieutenant..... | 10237 Prospect avenue. |
| Allen T. Courser | Truckman | 1630 104th street. |
| Frank S. Nesbit..... | Truckman | 10409 Prospect avenue. |
| Charles Wessing..... | Driver..... | 1335 W. 101st place. |

HOOK AND LADDER COMPANY No. 25.

4872 North Clark Street, Rogers Park.

| MEMBERS. | POSITION. | RESIDENCE. |
|------------------------|-----------------|---------------------------------|
| James H. Healy..... | Lieutenant..... | 4191 N. Ashland ave. |
| Henry G. Redieck | Truckman | 4358 E. Ravenswood Park avenue. |
| Charles M. Conway..... | Driver..... | 293 N. Franklin street. |

HOOK AND LADDER COMPANY No. 26.

1985 Wilcox Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|----------------------------|-----------------|------------------------|
| Peter D. Lynch | Captain..... | 2445 W. Monroe street. |
| Thomas J. Hanley..... | Lieutenant..... | 1961 W. Polk street. |
| William P. Padden..... | Truckman | 1229 W. Adams street. |
| John L. Wright | Truckman | 2296 W. Adams street. |
| William J. Thompson..... | Truckman | 2132 Washington blvd. |
| William Langdon..... | Truckman | 68 Forty-third avenue. |
| William J. Fitzgerald..... | Truckman | 741 Grand avenue. |
| Peter Mutter..... | Truckman | 2008 Wilcox avenue. |
| Reuben A. Bunnel..... | Driver..... | 1985 Wilcox avenue. |

HOOK AND LADDER COMPANY No. 27.

Southwest Corner Morse Avenue and One Hundred Twelfth Street.

This Company is maintained at the expense of the City, but its members are not members of the Department.

| MEMBERS. | POSITION. | RESIDENCE. |
|------------------------|-----------------|-----------------------------------|
| Joseph Vogt..... | Captain | 124 S. Stephenson street. |
| Philip A. Vogt..... | Lieutenant..... | 112 S. Stephenson street. |
| James Kennedy..... | Lieutenant..... | 248 S. Fulton street. |
| Nicholas Hunt..... | Truckman..... | Company Quarters. |
| Joseph H. O'Brien..... | Truckman..... | 409 One Hundred Fifteenth street. |
| Edward Klatt | Truckman..... | Company Quarters. |
| John Kolb | Truckman..... | 126 S. Stephenson street. |
| Andrew Jackson..... | Driver... .. | 315 Watt avenue. |
| Charles Cook..... | Driver | 303 S. Fulton street. |

HOSE COMPANY No. 3.

13359 Superior Avenue.

| MEMBERS. | POSITION. | RESIDENCE. |
|----------------------|-----------------|------------------------|
| Michael Moran..... | Lieutenant..... | 13246 Avenue O. |
| Emil Hansen | Pipeman..... | 13420 Superior avenue. |
| John C. Newcomb..... | Pipeman | 13507 Superior avenue. |

RIVERSIDE VOLUNTEER COMPANY.

13567 Indiana Avenue.

| | |
|----------------------|------------------|
| Peter Kipley..... | Captain |
| A. J. Brookfelt..... | First Assistant |
| Herman Simmick..... | Second Assistant |
| A. Stieman..... | President |
| F. L. Baecker..... | Vice-President |
| Christ Rippe..... | Treasurer |
| John E. Schafer..... | Secretary |

F. A. Feich,
 Richard Hess,
 John Pauls,
 Henry Kay,
 Herman Werner,
 Charles Peterson,
 Roman Perez,
 Simon Schoon,
 Emil Schuman,
 Henry Koehncke,

W. F. Wichman,
 Wm. J. Miller,
 John Pundt,
 John Schug,
 Fred Zurlinden,
 A. Baumgartner,
 Rudolph Stotzer,
 Theo. Kraefft,
 R. Baumgartner,
 John Brant,

Michael Stenzik,
 Conrad Kern,
 Gust. Berschiniski,
 Harvey Lockey,
 G. A. Schmidt,
 Leopold Hadorn,
 Carl Neidow,
 Albert Schultz,
 Chas. Bogenhold.

ELSDEN VOLUNTEER COMPANY.

Southwest Corner St. Louis Avenue and Fifty-first Street.

| | |
|-----------------------|------------|
| Myron J. Laslare..... | Captain |
| Wm. Gill..... | Lieutenant |
| Wm. Withal..... | Secretary |

Ed. Gill,
 Arthur Burton,
 Henry Moore,
 John Olson,

Chas. Wiedmaier,
 Chas. Freese,
 Wm. Lindsey,
 Oscar Renquest,

John Gill,
 Herman Grau,
 Richard Jacques.

CHICAGO LAWN VOLUNTEER COMPANY.

6245 Homan Avenue.

| | |
|-----------------------|-------------------|
| Fred Harrold | Foreman |
| William Kendall | Assistant Foreman |
| M. O. Blodgett | President |
| Edwin Reeves | Vice-President |
| I. A. Crocker | Secretary |
| D. F. Larkin | Treasurer |

| | | |
|------------------|--------------------|-----------------|
| J. A. Russell, | W. C. Craven, | C. M. Lannon, |
| H. L. Whitaker, | J. E. Ryan, | F. B. Giles, |
| George Cole, | J. Doherty, | J. S. Phillips, |
| G. A. Storey, | W. E. L. Campbell, | John Bauers, |
| C. A. Lieferman, | A. Boyden, | A. G. Conn, |
| R. F. Snyder, | Frank Smith, | C. O. Goodrich, |
| Chas. Murray, | N. E. Ogelsby, | Frank Chandler. |
| George Bertrand, | | |

NORWOOD PARK VOLUNTEER COMPANY.

Avondale Avenue, near St. Lawrence Avenue.

| | |
|----------------------|-------------------|
| James A. Low | Foreman |
| G. Guthier | Assistant Foreman |
| P. K. Lesenson | Secretary |
| Nels Sampson | Treasurer |

| | | |
|---------------|------------------|-------------------|
| L. F. Porter. | Chas. Schneider. | H. W. Vanderberg. |
| Chas. Bush. | S. W. Subern. | W. H. Mull. |

RETIRED MEMBERS.

| NAME. | WHEN APPOINTED. | RANK | | DATE. |
|------------------------|-----------------|----------------------------|----------------|-------|
| | | | WHEN RETIRED. | |
| Charles A. Anderson... | Sept. 15, 1859 | Captain | Oct. 1, 1888 | |
| Fred Allen..... | Nov. 12, 1862 | Engineer | Dec. 1, 1892 | |
| Issac M. Adler..... | Jan. 17, 1871 | Driver..... | Aug. 1, 1893 | |
| Claudius Blair..... | March 16, 1866 | Driver..... | Jan. 1, 1896 | |
| Joseph Chicocky..... | July 1, 1882 | Assistant Engineer. | Jan. 1, 1891 | |
| Henry V. Coleman... | Feb. —, 1865 | Engineer..... | Jan. 1, 1894 | |
| James H. Cunningham. | Sept. 30, 1891 | Pipeman..... | Jan. 1, 1894 | |
| John C. Cooney..... | March 21, 1864 | Engineer | April 15, 1894 | |
| Phelim J. Devitt..... | June 19, 1873 | Lieutenant..... | Dec. 31, 1882 | |
| John Doyle..... | Jan. 13, 1863 | Engineer | May 1, 1891 | |
| George W. Dow..... | July 9, 1883 | Driver..... | July 1, 1892 | |
| John T. Drake..... | July 17, 1888 | Driver..... | July 1, 1892 | |
| Nicholas Dubach..... | May 6, 1865 | Asst. Fire Marshal. | July 1, 1893 | |
| James R. Duffy..... | April 26, 1883 | Engineer | July 1, 1896 | |
| James F. Enright..... | July 1, 1864 | Engineer | Jan. 1, 1888 | |
| John J. Fleming..... | June 16, 1882 | Pipeman... .. | July 1, 1896 | |
| James J. Grant..... | May —, 1861 | Pipeman..... | Jan. 18, 1890 | |
| John H. Greene..... | Dec. 24, 1864 | 2d Assistant Fire Marshal. | May 1, 1895 | |
| John L. Haslett..... | July 12, 1876 | Truckman | July 31, 1894 | |
| Robert L. Hunt..... | Sept. 15, 1860 | Captain..... | July 31, 1894 | |
| John B. Jaimeyfield... | Aug. 20, 1874 | Pipeman | Jan. 1, 1896 | |
| James Kingswell..... | Dec. 31, 1869 | Engineer | May 1, 1891 | |
| Joel A. Kinney..... | Dec. 25, 1858 | Clerk..... | July 15, 1892 | |
| Frederick J. Kaeder... | June 13, 1883 | Captain..... | April 15, 1896 | |
| Anthony Lagger..... | March 4, 1867 | Lieutenant..... | July 1, 1892 | |
| William J. Moore..... | Dec. 24, 1874 | Driver..... | Jan. 1, 1890 | |

RETIRED MEMBERS—Continued.

| NAME. | WHEN APPOINTED. | | RANK WHEN RETIRED. | DATE. | |
|------------------------|-----------------|----------|-----------------------|-------|----------|
| Thomas H. Maxwell... | May | 5, 1865 | Pipeman..... | Sept. | 10, 1891 |
| Leo Meyers..... | Jan. | 5, 1859 | Asst. Fire Marshal. | Aug. | 10, 1893 |
| Edward W. Murphy... | Feb. | 18, 1875 | Asst. Fire Marshal. | Jan. | 1, 1894 |
| John E. Mooney | June | 4, 1890 | Lieutenant..... | Jan. | 1, 1895 |
| Charles J. McKimm.... | Nov. | 25, 1889 | Truckman | April | 1, 1894 |
| Peter Phelan..... | May | 1, 1870 | Pipeman..... | Jan. | 19, 1895 |
| Alfred W. Pendleton... | June | 13, 1877 | Captain..... | Jan. | 1, 1896 |
| Joseph Ross..... | May | 2, 1872 | Pipeman..... | July | 31, 1894 |
| Maurice W. Shay..... | Sept. | 23, 1861 | Fire Inspector.... | May | 1, 1891 |
| William C. Saller..... | May | 1, 1886 | Pipeman..... | Sept. | 1, 1891 |
| John Shay..... | May | 7, 1886 | Pipeman..... | April | 1, 1893 |
| Joseph St. Peter..... | July | 9, 1890 | Truckman | Jan. | 1, 1894 |
| Lawrence A. Shean.... | June | 11, 1881 | Pipeman..... | July | 1, 1895 |
| Lorns Walter..... | — | —, 1867 | Captain | July | 1, 1893 |

EXHIBIT "B."

STATISTICS OF FIRES.

The calls on the department during the past year were 5,693, being 1,124, or $16\frac{1}{2}$ per cent. less than for the previous year; the number of fires were 4,414, being 902, or 17 per cent. less. Of the total number of fires, 2,603 or 59 per cent., reported a loss of less than ten dollars each; while in but four cases did the loss amount to \$30,000 or more. The total loss was \$1,979,355, or $33\frac{1}{3}$ per cent. less than for the previous year.

The serious fires, in detail, were as follows :

January 11, a six-story brick building, 66 x 100 feet, Nos. 9 to 15 River street, used for the manufacture of baking powder and extracts. The fire originated in the basement, from an unknown cause, and extended to the upper floors by means of the elevator-shaft and rear stairway. When the alarm was turned in, at 9:08 p. m., the fire had gained such headway that on the arrival of the department, two minutes later, a second alarm was sent in, followed at 9:30 p. m. by a third alarm, and at 9:44 p. m. by a special call for ten additional engines. Nineteen steamers, the fire-boats Yosemite and Fire Queen and five hook and ladder trucks were in service. The fire was under control in one and one-half hours. Valuation, \$90,000; loss, \$35,000; insurance, \$61,000.

March 16, a five-story and basement brick building, 75x125 feet, Nos. 61 to 65 Clybourn place, occupied by an engraving company. The fire, the origin of which is unknown, had spread through the entire building on the arrival of the department, in response to the alarm at 12:36 p. m., and a combined second and third alarm was at once sent in. With the additional help thus secured the fire was soon subdued. Ten steamers and three trucks were in service. Valuation, \$50,000; loss, \$30,000; insurance, \$35,800.

July 18, a two-story brick building, 300 x 400 feet, Nos. 3828 to 3836 Cottage Grove avenue, used as street-car barns. The fire, of unknown origin, had gained a good headway before the arrival of the department, and there being no fire walls to check its progress, the inflammable contents caused its spread through the entire building. So rapid was the progress of the flames that four men employed on the premises were unable to escape and were burned to death. The alarm was received at 7:15 p. m., followed by a combined alarm at 7:22 p. m., and special calls at 7:31 p. m. and 7:46 p. m., for six and five engines respectively. Twenty steamers and four trucks were in service; the fire was under control in two hours. Valuation, \$375,000; loss, \$200,000; insurance, \$311,000.

October 26, a six-story frame building, 100 x 200 feet, on the north branch of the Chicago river, near Haines street, known as Elevator A, and used for the storage of grain. The fire is supposed to have been caused by a spark from a passing tug-boat.

Neither building nor contents offered any impediment to the flames, which at once enveloped the entire structure. The alarm was received at 11:46 a. m. The most direct route for the nearest companies was via Halsted street bridge, but as this bridge was out of repair it was necessary to make a detour to Division street, causing considerable delay. Adjoining the building on the northwest was its counterpart, known as Elevator B, which took fire at once. Both structures were filled with grain, and being built of wood were soon a mass of flames. A combined alarm was sent in at 11:52 a. m., followed at 12:08 p. m. by a special call for ten additional steamers, and at 12:43 p. m. by a call for the fire-boat Geyser. The Fire Queen got first water on the fire and was ably seconded later by the Yosemite and Geyser. Twenty-four steamers were on the ground and four trucks. Although adjacent property was in imminent danger, the damage was confined to the two elevators, and was under control within three hours. Valuation, \$1,200,000; loss, \$700,000; insurance, \$1,000,000.

FIRE DEPARTMENT.

COMPARATIVE STATEMENT

SHOWING THE NUMBER OF FIRES, EACH RESULTING IN A LOSS OF \$30,000 OR UPWARDS, THAT HAVE OCCURRED SINCE 1880.

| Year. | No. of Fires. | Value of Buildings. | Value of Contents. | Total Valuation. | Loss on Buildings. | Loss on Contents. | Total Loss. | Total Insurance. | Av. Loss on Each Fire. | Percentage of Loss to Total Valuation. |
|-------|------------------|------------------------|-----------------------|---------------------|-----------------------|----------------------|---------------|---------------------|---------------------------|--|
| 1881 | 5 | \$ 202,000 | \$ 464,992 | \$ 666,992 | \$ 72,650 | \$ 249,767 | \$ 322,417 | \$ 390,000 | \$ 64,483 | 48 |
| 1882 | 2 | 120,000 | 152,000 | 272,000 | 13,500 | 106,260 | 119,760 | 278,000 | 59,880 | 44 |
| 1883 | 8 | 779,000 | 2,196,000 | 2,975,000 | 104,110 | 757,680 | 861,790 | 2,103,099 | 107,524 | 29 |
| 1884 | 9 | 659,000 | 899,700 | 1,558,700 | 130,740 | 433,563 | 564,303 | 1,110,050 | 62,700 | 36 |
| 1885 | 16 | 1,242,200 | 4,983,550 | 6,225,750 | 252,250 | 1,566,099 | 1,818,349 | 3,669,266 | 113,617 | 29 |
| 1886 | 8 | 687,600 | 1,463,210 | 2,155,810 | 134,675 | 710,738 | 865,413 | 1,487,755 | 108,177 | 40 |
| 1887 | 11 | 896,600 | 2,402,700 | 3,299,300 | 218,720 | 914,009 | 1,132,729 | 2,136,055 | 102,975 | 34 |
| 1888 | 8 | 495,583 | 1,305,356 | 1,800,939 | 156,527 | 472,904 | 629,431 | 1,209,050 | 78,679 | 35 |
| 1889 | 16 | 1,539,720 | 3,501,302 | 5,041,022 | 274,245 | 1,199,763 | 1,474,008 | 3,484,000 | 92,125 | 29 |
| 1890 | 10 | 1,393,650 | 5,712,967 | 7,106,617 | 135,350 | 848,450 | 983,800 | 2,179,486 | 98,380 | 14 |
| 1891 | 16 | 1,427,564 | 4,031,885 | 5,509,549 | 455,376 | 1,322,486 | 1,777,862 | 4,260,150 | 111,116 | 34 |
| 1892 | 10 | 912,000 | 899,000 | 1,841,000 | 328,025 | 335,315 | 663,340 | 1,357,866 | 66,334 | 36 |
| 1893 | 18 | 2,561,900 | 3,411,029 | 5,972,929 | 586,120 | 992,060 | 1,578,180 | 2,976,850 | 87,677 | 26 |
| 1894 | 12 | 3,162,600 | 3,928,270 | 7,090,870 | 636,150 | 1,122,675 | 1,778,825 | 4,631,700 | 148,235 | 25 |
| 1895 | 19 | 2,119,100 | 4,254,550 | 6,373,650 | 547,225 | 1,362,750 | 1,909,975 | 4,890,400 | 100,525 | 30 |
| 1896 | 4 | 635,000 | 1,030,000 | 1,715,000 | 325,000 | 640,000 | 965,000 | 1,407,800 | 241,250 | 56 |
| Total | 172 | \$ 18,863,517 | \$ 40,741,511 | \$ 59,605,028 | \$ 4,410,663 | \$ 13,035,519 | \$ 17,465,182 | \$ 37,571,557 | \$ 101,502 | 29 |

FIRE MARSHAL'S REPORT.

85

STATEMENT SHOWING THE NUMBER OF FIRES, VALUATION OF EXPOSED PROPERTY, LOSS AND INSURANCE INVOLVED, FOR THE YEAR ENDING DECEMBER 31, 1896.

| MONTHS. | No. of Fires. | Valuation of Buildings. | Valuation of Contents. | Total Valuation. | Loss on Buildings. | Loss on Contents. | Total Loss. | Total Insurance. | Insurance over Loss. | Loss over Insurance. |
|--------------|------------------|----------------------------|---------------------------|---------------------|-----------------------|----------------------|----------------|---------------------|-------------------------|-------------------------|
| January.... | 398 | \$ 6,939,215 | \$ 4,876,955 | \$ 11,806,170 | \$ 93,145 | \$ 74,115 | \$ 167,260 | \$ 6,841,800 | \$ 6,679,815 | \$ 5,275 |
| February .. | 322 | 7,824,750 | 5,538,495 | 13,363,245 | 58,050 | 38,150 | 96,200 | 6,255,235 | 6,162,675 | 3,640 |
| March..... | 356 | 5,131,040 | 4,149,380 | 9,280,420 | 62,030 | 106,175 | 168,205 | 6,424,700 | 6,258,035 | 1,540 |
| April..... | 378 | 4,188,610 | 2,888,960 | 7,077,570 | 29,320 | 24,015 | 53,335 | 4,646,700 | 4,604,080 | 10,715 |
| May..... | 423 | 4,142,815 | 2,791,980 | 6,934,795 | 45,800 | 36,035 | 81,835 | 4,541,790 | 4,469,010 | 9,055 |
| June..... | 321 | 3,166,305 | 1,473,265 | 4,639,570 | 26,190 | 23,280 | 49,470 | 2,605,125 | 2,568,370 | 12,715 |
| July..... | 503 | 4,329,155 | 3,542,190 | 7,871,345 | 90,770 | 182,735 | 273,505 | 4,609,800 | 4,344,480 | 8,185 |
| August..... | 376 | 2,858,390 | 2,193,965 | 5,052,355 | 36,955 | 27,730 | 64,685 | 3,177,560 | 3,118,345 | 5,470 |
| September.. | 278 | 2,357,665 | 2,140,660 | 4,498,325 | 30,825 | 23,415 | 54,240 | 2,913,450 | 2,875,730 | 14,520 |
| October.... | 366 | 4,686,065 | 4,083,415 | 8,769,480 | 367,065 | 487,825 | 854,890 | 6,045,570 | 5,201,860 | 11,180 |
| November.. | 334 | 4,503,710 | 4,310,940 | 8,814,650 | 35,980 | 23,265 | 59,245 | 6,637,050 | 6,578,415 | 610 |
| December.. | 359 | 5,498,885 | 3,454,830 | 8,953,715 | 29,705 | 26,780 | 56,485 | 5,271,350 | 5,217,340 | 2,475 |
| Total 1896.. | 4,414 | \$ 55,616,605 | \$ 41,415,035 | \$ 97,061,640 | \$ 905,835 | \$ 1,073,520 | \$ 1,979,355 | \$ 59,970,130 | \$ 58,076,155 | \$ 85,380 |
| Year 1895.. | 5,316 | 72,197,035 | 48,597,725 | 120,794,760 | 1,133,845 | 1,840,915 | 2,974,760 | 73,443,646 | 70,888,441 | 219,555 |
| Decrease .. | 902 | 16,580,430 | 7,151,690 | 23,733,120 | 228,010 | 767,395 | 995,405 | 13,473,516 | 12,812,486 | 134,175 |
| Increase .. | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |

Percentage of loss on property involved, 2.04.

COMPARATIVE STATEMENT SHOWING THE NUMBER OF FIRES,
VALUE OF PROPERTY INVOLVED, LOSSES, IN-
SURANCE, ETC., SINCE 1863.

| Years. | No. of Fires. | Value of Property Involved. | Total Loss. | Total Insurance. | Average Loss per Fire. | Percentage of Loss on Property In- volved. | Population. | Population to each Fire. | Loss per Capita. |
|----------|------------------|-----------------------------------|----------------|---------------------|------------------------------|--|-------------|-----------------------------|------------------|
| 1863-4 | 186 | No Record. | \$ 355,600 | \$ 272,500 | 1.912 | ..... | 153,769 | 827 | \$ 2 31 |
| 1864-5 | 193 | | 651,798 | 555,300 | 3.377 | ..... | 169,353 | 877 | 3 85 |
| 1865-6 | 243 | | 1,216,466 | 941,602 | 5.006 | ..... | 178,492 | 735 | 6 62 |
| 1866-7 | 315 | | 2,487,973 | 1,643,445 | 7.898 | ..... | 200,418 | 636 | 12 41 |
| 1867-8 | 515 | | 4,315,332 | 3,417,288 | 8.183 | ..... | 226,236 | 439 | 19 07 |
| 1868-9 | 405 | | 560,169 | 632,248 | 1.383 | ..... | 252,054 | 622 | 2 22 |
| 1869-70 | 600 | | 871,905 | 600,061 | 1.453 | ..... | 279,330 | 466 | 3 12 |
| 1870-1 | 669 | | 2,447,845 | 2,183,498 | 3.659 | ..... | 306,605 | 458 | 7 98 |
| 1871-2 * | 489 | | 972,800 | 745,000 | 1.989 | ..... | 337,000 | 685 | 2 89 |
| 1872-3 | 441 | | 680,099 | 3,763,275 | 1.542 | ..... | 367,393 | 833 | 1 85 |
| 1873-4 | 466 | \$ 7,041,700 | 1,013,246 | 3,641,735 | 2.175 | 14.39 | 381,402 | 818 | 2 66 |
| 1874-5 † | 473 | | 11,063,616 | 2,345,684 | 4.959 | 21.22 | 395,408 | 836 | 5 93 |
| 1875 | 332 | | 4,601,770 | 127,014 | 386 | 2 76 | 401,535 | 1,209 | 32 |
| 1876 | 477 | | 9,173,004 | 387,951 | 813 | 4 23 | 407,661 | 855 | 95 |
| 1877 | 445 | | 10,868,921 | 1,044,997 | 2,348 | 9 62 | 422,196 | 949 | 2 48 |
| 1878 | 478 | | 6,751,234 | 306,317 | 641 | 4 54 | 436,731 | 914 | 70 |
| 1879 | 638 | | 11,501,473 | 572,082 | 897 | 4 97 | 469,515 | 736 | 1 22 |
| 1880 | 804 | | 14,752,066 | 1,135,816 | 1,413 | 7.70 | 503,298 | 626 | 2 26 |
| 1881 | 895 | | 19,738,508 | 921,495 | 1,030 | 4.67 | 531,996 | 591 | 1 73 |
| 1882 | 981 | | 26,435,705 | 569,885 | 581 | 2.16 | 560,693 | 572 | 1 02 |
| 1883 | 1,153 | 124,003,193 | 42,383,215 | 1,379,736 | 1,197 | 3.26 | 595,359 | 517 | 2 32 |
| 1884 | 1,278 | | 22,685,601 | 968,229 | 758 | 4.27 | 629,985 | 493 | 1 54 |
| 1885 | 1,309 | | 48,055,541 | 2,225,134 | 1,700 | 4.06 | 661,923 | 506 | 3 36 |
| 1886 | 1,543 | | 43,646,452 | 1,492,084 | 967 | 3.42 | 693,861 | 450 | 2 15 |
| 1887 | 1,853 | | 62,241,191 | 1,839,058 | 922 | 2.95 | 748,256 | 404 | 2 46 |
| 1888 | 1,871 | | 76,618,085 | 1,363,427 | 729 | 1.78 | 802,651 | 429 | 1 70 |
| 1889 | 2,075 | | 66,409,323 | 2,154,340 | 1,038 | 3.24 | 1,000,000 | 482 | 2 15 |
| 1890 | 2,755 | | 108,650,005 | 2,092,071 | 759 | 1.93 | 1,099,133 | 397 | 1 90 |
| 1891 | 3,353 | | 124,003,193 | 3,053,874 | 911 | 2 46 | 1,200,000 | 358 | 2 54 |
| 1892 | 3,549 | | 123,482,011 | 1,521,445 | 429 | 1.23 | 1,438,010 | 405 | 1 06 |
| 1893 | 5,224 | 120,794,760 | 330,028,212 | 3,149,590 | 603 | .95 | 1,500,000 | 285 | 2 01 |
| 1894 | 5,174 | | 129,046,541 | 3,254,140 | 629 | 2.52 | 1,567,727 | 303 | 2 08 |
| 1895 | 5,316 | | 120,794,760 | 2,974,760 | 560 | 2.37 | 1,650,000 | 310 | 1 80 |
| 1896 | 4,414 | | 97,061,640 | 1,979,355 | 448 | 2.04 | 1,750,000 | 399 | 1 13 |

* The great fire not included.

† The large fire included.

‡ Nine months, ending December 31, 1875.

CAUSES OF FIRES, DURING THE YEAR 1896.

| | |
|--|-----|
| Ashes and hot coals..... | 86 |
| Blown down and ignited..... | 2 |
| Bonfires and burning rubbish | 128 |
| Candles and torches, carelessness with | 19 |
| Carelessness not otherwise specified | 17 |
| Children playing with fire and matches | 174 |
| Chimney fires | 180 |
| Christmas trees | 12 |
| Cigar stubs and tobacco pipes | 62 |
| Collisions, railroad | 2 |
| Defective flues | 195 |
| Dryroom overheated | 8 |
| Electric wires and lights..... | 85 |
| Engines and boilers, stationary | 16 |
| Explosions, alcohol, benzine and naphtha | 3 |
| Explosions, chemical..... | 16 |
| Explosions, dust | 9 |
| Explosions, gas | 20 |
| Explosions, gasoline and kerosene | 99 |
| Explosions, lamps and lanterns..... | 160 |
| Explosions, oil | 22 |
| Explosions, oil and gasoline stoves | 161 |

| | |
|--|-----|
| Explosions, water backs | 9 |
| Fireworks | 77 |
| Forge, coals from | 5 |
| Friction | 13 |
| Fumigating | 14 |
| Furnaces, heating | 39 |
| Furnaces, foundries, etc..... | 3 |
| Gas jets..... | 64 |
| Gas pipes, leak in | 37 |
| Hot iron and molten metals..... | 7 |
| Ignition, alcohol, benzine and naphtha | 11 |
| Ignition, charcoal | 1 |
| Ignition, chemicals | 8 |
| Ignition, gas | 29 |
| Ignition, gasoline and kerosene | 100 |
| Ignition, grease, oil and meats..... | 74 |
| Ignition, paints and varnish | 6 |
| Ignition, tar, rosin and wax | 49 |
| Incendiarism, known | 12 |
| Incendiarism, supposed | 149 |
| Lamp and lantern accidents | 56 |
| Lightning | 35 |
| Matches, carelessness with | 255 |
| Matches, rats and mice with..... | 19 |
| Mischievous children, etc..... | 15 |
| Oil and gasoline stove accidents..... | 87 |

| | |
|---------------------------------------|-------------|
| Open fire places and grates | 30 |
| Overheated and defective kilns..... | 5 |
| Overheated and defective ovens | 11 |
| Plumbers' and tinnern's furnaces..... | 5 |
| Prairie fires | 47 |
| Rekindlings | 16 |
| Salamanders | 10 |
| Smokehouses overheated | 4 |
| Sparks, chimney, etc | 160 |
| Sparks, locomotive | 65 |
| Sparks, river craft | 11 |
| Spontaneous combustion..... | 52 |
| Steam pipes | 20 |
| Stoves and ranges | 186 |
| Stovepipes..... | 16 |
| Tailor's goose..... | 1 |
| Thawing water-pipes | 58 |
| Thawing gas-pipes | 3 |
| Tramps | 32 |
| Unknown | 1,038 |
| Total | <hr/> 4,114 |

CLASSIFICATION OF RISKS, 1896.

| | | | |
|-----------------------------------|-----|--------------------------------------|-------|
| Agricultural implement factories. | 3 | Churches. | 25 |
| Ash boxes. | 35 | Cigar factories. | 5 |
| Asphalt works. | 5 | Cigar stores. | 22 |
| Asylums. | 4 | Cloak factories. | 4 |
| Awning factories. | 1 | Clothing stores, wholesale. | 2 |
| Awnings. | 1 | Clothing stores, retail. | 18 |
| Bakeries. | 41 | Club houses. | 11 |
| Banks. | 3 | Canal boats. | 2 |
| Barber shops. | 23 | Coal Piles. | 1 |
| Barns and stables. | 292 | Coal and wood offices. | 4 |
| Basket factories. | 1 | Coffee and spice stores. | 11 |
| Bathrooms. | 1 | Colleges. | 1 |
| Bicycle factories. | 12 | Commission stores. | 10 |
| Bill boards. | 2 | Cooper shops. | 6 |
| Billiard Halls. | 1 | Cornice factories. | 2 |
| Bird stores. | 1 | Crockery stores. | 13 |
| Blacksmith shops. | 24 | Cutlery factories. | 3 |
| Boiler shops. | 3 | Distilleries. | 1 |
| Box factories, wood. | 1 | Docks. | 6 |
| Box factories, paper. | 4 | Dredges. | 1 |
| Boats, sail. | 10 | Drug stores, retail. | 22 |
| Boats, tug. | 4 | Drug stores, wholesale. | 4 |
| Boathouses. | 2 | Dry goods stores, retail. | 18 |
| Boot and shoe factories. | 2 | Dry goods stores, wholesale. | 1 |
| Boot and shoe stores. | 24 | Dry kilns. | 3 |
| Breweries. | 9 | Dwelling houses. | 2,040 |
| Brick and tile works. | 5 | Dye houses. | 5 |
| Butcher and meat markets. | 48 | Electric wires. | 9 |
| Canal boats. | 1 | Electric goods factories. | 2 |
| Candy factories. | 19 | Fences. | 12 |
| Car barns. | 4 | Fire engine houses; police stations. | 1 |
| Car shops. | 4 | Fertilizing works. | 4 |
| Carpenter shops. | 22 | Fish depots. | 3 |
| Carriage factories. | 4 | Flour and feed mills. | 3 |
| Chemical works. | 4 | Flour and feed stores. | 16 |

CLASSIFICATION OF RISKS, 1896—CONTINUED.

| | | | |
|-----------------------------------|-----|-----------------------------------|----|
| Foundries and machine shops.... | 40 | Locksmith shops | 1 |
| Freight houses..... | 2 | Lumber yards..... | 5 |
| Fruit stands | 3 | Lunch factories..... | 2 |
| Fruit stores..... | 6 | Malt houses | 4 |
| Furniture factories..... | 12 | Manufacturing buildings, general. | 32 |
| Furniture stores..... | 11 | Manure boxes..... | 3 |
| Gas mains..... | 2 | Marble yards | 1 |
| Gasoline barrels | 2 | Milk depots..... | 2 |
| Gas works..... | 1 | Millinery stores..... | 8 |
| General merchandise stores..... | 14 | Mineral and soda water factories. | 1 |
| Gentlemen's furnishing stores ... | 8 | Molding factories..... | 1 |
| Glass works..... | 1 | Museums..... | 3 |
| Glove factories, .. | 1 | Music stores..... | 1 |
| Glue factories | 2 | Nail factories | 1 |
| Grain elevators..... | 8 | Notion stores. . . | 27 |
| Grocery stores, retail..... | 112 | Office buildings..... | 29 |
| Grocery stores, wholesale..... | 7 | Oil houses..... | 5 |
| Ham houses | 5 | Oil tanks..... | 1 |
| Halls | 3 | Paint and varnish stores..... | 30 |
| Hardware stores..... | 10 | Pawn shops..... | 3 |
| Harness shops | 6 | Photograph galleries..... | 9 |
| Hat and cap stores | 1 | Piano factories. | 3 |
| Hay, loads..... | 3 | Picture-frame factories | 8 |
| Hay stacks, | 5 | Planing mills | 25 |
| Hospitals..... | 4 | Plumbing and gasfitting shops... | 11 |
| Hotels..... | 45 | Plumbing supplies stores, . . . | 1 |
| Hot houses..... | 1 | Postoffices..... | 1 |
| Ice factories | 3 | Power-houses, cable . . . | 1 |
| Ice houses | 3 | Power-houses, electric..... | 3 |
| Iron and steel works..... | 1 | Prairie fires..... | 50 |
| Jewelry stores..... | 6 | Printing offices..... | 19 |
| Junk and second-hand shops..... | 5 | Rag shops..... | 7 |
| Lamp posts..... | 24 | Railroad freight cars | 37 |
| Laundries..... | 21 | Railroad tank cars | 1 |
| Leather stores | 3 | Railroad passenger cars..... | 5 |
| Lime boxes..... | 1 | Restaurants..... | 65 |
| Liquor stores, wholesale | 1 | R. R. Depots..... | 2 |

CLASSIFICATION OF RISKS, 1896—CONTINUED.

| | | | |
|---------------------------------------|-----|-----------------------------------|-------|
| Rubbish | 112 | Tailor shops | 52 |
| Saloons... .. | 199 | Tanneries.. .. | 4 |
| Schoolhouses | 15 | Tar kettles..... | 21 |
| Sheds, wood and coal; out-houses. 116 | | Tassel factories | 1 |
| Shoddy mills..... | 1 | Telegraph poles | 3 |
| Shooting galleries..... | 1 | Tents | 2 |
| Sidewalks..... | 22 | Theatres..... | 6 |
| Sign painters | 1 | Tin shops | 6 |
| Slaughter houses..... | 9 | Tool houses..... | 3 |
| Smoke houses..... | 8 | Toy shops..... | 2 |
| Soap factories | 2 | Undertakers' shops..... | 2 |
| Statuary factories | 1 | Vacant buildings, unfinished | 9 |
| Storage buildings | 44 | Viaducts | 4 |
| Stores, vacant..... | 55 | Wagons..... | 4 |
| Street cars | 5 | Wall paper stores | 3 |
| Switch houses..... | 9 | | |
| | | Total fires..... | 4,414 |

TABLE SHOWING CLASSIFICATION OF LOSSES, AS TO AMOUNT, FOR 1896.

| | Jan. | Feb. | Mar. | April. | May. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. | Total. |
|------------------------------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| Nominal.....not exceeding \$ | 10. | 173 | 188 | 236 | 260 | 199 | 326 | 207 | 165 | 216 | 221 | 212 | 2,603 |
| Over \$ | 50. | 83 | 78 | 61 | 76 | 58 | 75 | 65 | 44 | 69 | 50 | 60 | 776 |
| " 100. | 30 | 11 | 20 | 13 | 24 | 17 | 29 | 22 | 14 | 23 | 20 | 23 | 246 |
| " 1,000. | 64 | 69 | 50 | 58 | 54 | 33 | 54 | 70 | 46 | 46 | 33 | 51 | 628 |
| " 5,000. | 13 | 9 | 12 | 9 | 5 | 12 | 16 | 10 | 7 | 10 | 8 | 12 | 123 |
| " 10,000. | 5 | 1 | 3 | 1 | 3 | 2 | 1 | 2 | 2 | 1 | 1 | 1 | 23 |
| " 20,000. | 2 | 2 | 4 | ..... | 1 | ..... | 1 | ..... | ..... | ..... | 1 | ..... | 11 |
| " 30,000. | ..... | ..... | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1 |
| " 40,000. | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| " 50,000. | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| " 100,000. | ..... | ..... | ..... | ..... | ..... | ..... | 1 | ..... | ..... | 1 | ..... | ..... | 2 |
| Total | 398 | 322 | 356 | 378 | 423 | 321 | 503 | 376 | 278 | 366 | 334 | 359 | 4,414 |

CLASSIFICATION OF ALARMS.

| MONTHS. | No. of Fires. | False Box Alarms. | False Still Alarms. | Still Alarms in Advance of Box. | Second Alarms. | Third Alarms. | Second and Third Alarms Combined. | Special Calls. | Special Duty. | Alarms Outside City Limits. | Total Alarms 1896. |
|----------------|---------------|-------------------|---------------------|---------------------------------|----------------|---------------|-----------------------------------|----------------|---------------|-----------------------------|--------------------|
| January..... | 398 | 22 | 42 | 49 | 8 | 5 | 5 | 7 | 8 | 2 | 546 |
| February..... | 322 | 21 | 31 | 41 | 3 | 1 | 4 | 1 | 1 | 2 | 427 |
| March..... | 356 | 18 | 33 | 42 | 11 | 4 | 4 | 5 | .. | 1 | 472 |
| April..... | 378 | 25 | 36 | 37 | 6 | 2 | 2 | 2 | 2 | 1 | 491 |
| May..... | 423 | 21 | 23 | 49 | 6 | .. | 3 | .. | 2 | 2 | 529 |
| June .. | 321 | 20 | 37 | 33 | 6 | 2 | .. | .. | 2 | .. | 432 |
| July..... | 503 | 29 | 40 | 43 | 7 | .. | 2 | 2 | 1 | .. | 627 |
| August..... | 376 | 14 | 33 | 48 | 6 | .. | 1 | .. | 1 | .. | 480 |
| September..... | 278 | 21 | 26 | 37 | 3 | .. | .. | .. | 2 | .. | 367 |
| October..... | 366 | 19 | 24 | 45 | 6 | 2 | 2 | 2 | 10 | 1 | 447 |
| November..... | 334 | 19 | 32 | 39 | 5 | 2 | 1 | .. | 3 | .. | 485 |
| December..... | 359 | 21 | 19 | 42 | 6 | .. | .. | .. | .. | 3 | 450 |
| Total..... | 4,414 | 250 | 376 | 505 | 73 | 18 | 24 | 19 | 32 | 12 | 5,693 |

STATEMENT SHOWING THE MANNER IN WHICH
FIRES WERE EXTINGUISHED DURING
THE YEAR 1896.

| | |
|--|-------|
| By occupants and others before arrival of Department..... | 737 |
| By Department smothering, cutting out with axes, etc..... | 122 |
| By Department with pails of water | 108 |
| By Department with fire hydrant stream | 74 |
| By Department with fire hydrant stream and chemical | 10 |
| By Department with portable pumps | 1,294 |
| By Department with portable chemical extin- guishers | 45 |
| By Department with portable chemical extin- guishers and pumps..... | 48 |
| By Department with one chemical engine | 320 |
| By Department with two or more chemical engines..... | 16 |
| By Department with one steam engine..... | 581 |
| By Department with one steam engine and one chemical engine..... | 267 |
| By Department with one steam engine and two or more chemical engines..... | 38 |
| By Department with two or more steam en- gines | 186 |
| By Department with two or more steam en- gines and chemical engines | 261 |
| Chimney fires, prairie fires, burning rubbish, etc | 307 |
| Total | 4,414 |

FIRE DEPARTMENT.

CLASSIFICATION OF BUILDINGS, ETC., AND EXTENT OF FIRES DURING THE TWELVE
MONTHS ENDING DECEMBER 31, 1896.

| MONTHS. | Buildings. | | Miscellaneous. | Total. | EXTENT OF FIRES. | | | | | | | | Total Fires. |
|-----------|------------|-----------------|----------------|--------|----------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|--------------|
| | Wood. | Other Material. | | | One Building point origin. | Extending to 2 Buildings. | Extending to 3 Buildings. | Extending to 4 Buildings. | Extending to 5 Buildings. | Extending to 6 Buildings. | Extending to 7 Buildings. | Extending to 8 Buildings. | |
| January | 185 | 216 | 11 | 412 | 388 | 6 | 4 | ... | ... | ... | ... | ... | 398 |
| February | 142 | 178 | 9 | 329 | 316 | 5 | 1 | ... | ... | ... | ... | ... | 322 |
| March | 181 | 159 | 23 | 363 | 351 | 4 | ... | 1 | ... | ... | ... | ... | 356 |
| April | 179 | 156 | 49 | 384 | 374 | 3 | ... | 1 | ... | ... | ... | ... | 378 |
| May | 226 | 150 | 67 | 443 | 412 | 6 | 3 | 1 | ... | 1 | ... | ... | 423 |
| June | 152 | 136 | 40 | 328 | 317 | 1 | 3 | ... | ... | ... | ... | ... | 321 |
| July | 259 | 215 | 70 | 544 | 478 | 16 | 5 | 3 | ... | ... | 1 | ... | 503 |
| August | 205 | 158 | 33 | 396 | 361 | 10 | 5 | ... | ... | ... | ... | ... | 376 |
| September | 148 | 107 | 34 | 289 | 268 | 9 | 1 | ... | ... | ... | ... | ... | 278 |
| October | 192 | 148 | 47 | 387 | 353 | 9 | 1 | 2 | 1 | ... | ... | ... | 366 |
| November | 148 | 149 | 48 | 345 | 327 | 3 | 4 | ... | ... | ... | ... | ... | 334 |
| December | 177 | 163 | 35 | 375 | 353 | 3 | 1 | ... | 1 | ... | ... | 1 | 359 |
| Total | 2,194 | 1,935 | 466 | 4,595 | 4,298 | 75 | 28 | 8 | 2 | 1 | 1 | 1 | 4,414 |

The miscellaneous fires consisted of: Rubbish, 145; prairie fires, 56; freight cars, 40; ash boxes, 37; tar kettles, 29; lamp posts, 24; sidewalks, 16; steam boats, 12; fences, 10; electric wires, 9; docks and hay stacks, 8 each; awnings, 7; gas main and sail boats, 6 each; grain elevators, lumber piles, fruit stands and wagons, 5 each; street cars and viaducts, 4 each; bill boards, passenger cars and manure boxes, 3 each; canal boats, lunch stands, tug-boats and telegraph poles, 2 each; bridges, coal piles, sleeping cars, tank cars, gasoline barrels, lime boxes, oil barrels and tents, 1 each.

HEIGHT OF BUILDINGS IN WHICH FIRES OCCURRED DURING THE YEAR 1896.

| Stories..... | 1 | 1½ | 2 | 2½ | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 13 | 14 | 16 | Total. |
|----------------------|-----|----|------|----|-----|-----|----|----|----|----|---|----|----|----|----|----|--------|
| Wood..... | 589 | 87 | 1366 | 6 | 131 | 11 | 4 | | | | | | | | | | 2,194 |
| Other Material | 109 | 10 | 531 | 1 | 729 | 371 | 81 | 52 | 29 | 12 | 3 | 2 | 1 | 1 | 2 | 1 | 1,975 |
| Total | 698 | 97 | 1897 | 7 | 860 | 382 | 85 | 52 | 29 | 12 | 3 | 2 | 1 | 1 | 2 | 1 | 4,129 |

| | | | |
|---|-------|--|-------|
| Fires originating in frame buildings..... | 2,035 | Number of fires confined to floor or place of origin..... | 3,899 |
| " " brick | 1,913 | " " extending beyond floor but confined to building, | 399 |
| " communicating to frame " | 159 | Number of fires extending to adjoining property..... | 91 |
| " " brick | 22 | " " beyond " | 22 |
| Total..... | 4,129 | | 116 |
| | | | 4,414 |

FIRE DEPARTMENT.

CASUALTIES TO CITIZENS AT FIRES FOR THE YEAR ENDING DECEMBER 31, 1896.

| DATE. | TIME. | | LOCATION. | Persons Injured. | | | CAUSE. |
|---------------|--------|-------|-----------|------------------|--------|-----------|---|
| | Month. | A. M. | P. M. | Men. | Women. | Children. | |
| January | 4 | 2:10 | ..... | 1 | ..... | ..... | Overcome by smoke and burned. |
| January | 5 | ..... | 4:39 | 1 | ..... | ..... | Trying to extinguish fire. |
| January | 5 | ..... | 4:37 | 2 | ..... | ..... | Explosion of gas. |
| January | 18 | 9:13 | ..... | 1 | ..... | ..... | Explosion of gas. |
| February ... | 4 | ..... | 7:54 | 1 | ..... | ..... | Overturning oil lamp. |
| February ... | 5 | 10:48 | ..... | 1 | 1 | 2 | Explosion of flashlight powder. |
| February ... | 16 | 11:37 | ..... | 1 | ..... | ..... | Explosion of gasoline. |
| February ... | 19 | 6:09 | ..... | 1 | 1 | 2 | Explosion of gasoline. |
| February ... | 25 | 10:21 | ..... | 1 | ..... | ..... | Jumped from 2d story of burning building. |
| February ... | 28 | ..... | 5:31 | 1 | ..... | ..... | Explosion of benzine. |
| March | 3 | ..... | 1:43 | 1 | ..... | ..... | Explosion of patent stove polish. |
| March | 7 | 5:42 | ..... | 1 | ..... | ..... | Explosion of gasoline. |
| March | 21 | 8:37 | ..... | ..... | 2 | ..... | Explosion of kerosene lamp. |
| March | 27 | ..... | 12:20 | ..... | 1 | 1 | Explosion of gasoline. |
| March | 30 | ..... | 11:58 | ..... | 1 | 1 | Explosion of gasoline stove. |
| April | 2 | ..... | 5:54 | 1 | ..... | ..... | Child playing with matches. |
| April | 6 | 11:40 | ..... | 1 | ..... | ..... | Ignition of bedding from stove. |
| April | 16 | ..... | 6:13 | 2 | ..... | ..... | Explosion of gasoline. |
| April | 19 | ..... | 3:51 | 1 | ..... | ..... | Explosion of kettle of varnish. |
| April | 22 | 9:34 | ..... | 1 | ..... | ..... | Explosion of gasoline. |
| April | 24 | 9:11 | ..... | 1 | ..... | ..... | Explosion of kerosene stove. |
| April | 28 | ..... | 8:25 | 1 | ..... | ..... | Explosion of gasoline stove. |
| May | 1 | ..... | 5:36 | ..... | ..... | ..... | Explosion of benzine. |
| May | 3 | ..... | 7:26 | ..... | ..... | ..... | Explosion of gasoline. |
| May | 4 | ..... | 6:00 | ..... | 1 | ..... | Explosion of kerosene lamp. |
| May | 9 | 11:08 | ..... | 1 | ..... | ..... | Struck by apparatus. |
| | | | | 1 | ..... | ..... | Explosion of gasoline stove. |

| | | | | | | | |
|----------------|----|-------|--------------------------------------|---|---|---|---|
| May..... | 9 | 4:30 | W. 48th Station, Met. Elevated R. R. | 1 | 1 | 1 | Explosion of gasoline. |
| May..... | 9 | 9:49 | 4254 Cottage Grove avenue | 1 | 1 | 1 | Ignition of gasoline while filling stove. |
| May..... | 10 | 9:10 | 3519 Honore street..... | 1 | 1 | 1 | Ignition of gasoline. |
| May..... | 11 | 1:50 | 558 W. Huron street..... | 1 | 1 | 1 | Trying to extinguish fire of unknown origin. |
| May..... | 14 | 7:23 | 313 W. Ohio street..... | 1 | 1 | 1 | Ignition of gasoline in stove. |
| May..... | 16 | 5:50 | 3624 Calumet avenue..... | 1 | 1 | 1 | Careless use of matches. |
| May..... | 24 | 7:43 | 148 Townsend street..... | 1 | 1 | 4 | Explosion of gasoline stove. |
| May..... | 25 | 11:23 | 3651 Dearborn street..... | 1 | 1 | 1 | Ignition of gasoline. |
| May..... | 30 | 6:30 | 539 S. Halsted street..... | 1 | 1 | 1 | Explosion of fireworks. |
| June..... | 6 | 11:30 | 814 120th street..... | 1 | 1 | 1 | Explosion of gasoline stove. |
| July..... | 4 | 11:50 | 686 W. Fifteenth street..... | 1 | 1 | 1 | Explosion of powder. |
| July..... | 9 | 7:45 | 661 Davis street..... | 1 | 1 | 1 | Ignition of gasoline stove. |
| July..... | 13 | 7:30 | 3740 Forest avenue..... | 1 | 1 | 1 | Explosion of kerosene. |
| July..... | 13 | 6:55 | 105 Fisk street..... | 1 | 1 | 1 | Explosion of gas. |
| July..... | 16 | 10:45 | 1039 N. Clark street..... | 1 | 1 | 1 | Jumping from 2d story of burning building. |
| July..... | 17 | 7:21 | 3328 State street..... | 1 | 1 | 1 | Trying to extinguish fire in closet. |
| July..... | 18 | 9:21 | 643 Washington blvd..... | 1 | 1 | 1 | Ignition of gasoline. |
| July..... | 18 | 7:15 | 3828 Cottage Grove avenue | 4 | 1 | 4 | Caught in burning building. |
| July..... | 27 | 1:58 | 738 Sixty-fourth street..... | 1 | 1 | 1 | Explosion of bug poison. |
| July..... | 29 | 1:16 | 172 Poromac avenue..... | 1 | 1 | 2 | Ignition of kerosene in stove. |
| July..... | 7 | 11:38 | 626 W. Erie street..... | 1 | 1 | 1 | Ignition of gasoline. |
| August..... | 7 | 3:51 | 2703 Wabash avenue..... | 1 | 1 | 1 | Ignition of flashlight powder. |
| August..... | 7 | 2:33 | 734 Sixty-fourth street..... | 1 | 1 | 1 | Ignition of gasoline. |
| August..... | 26 | 5:05 | 488 Marshfield avenue..... | 1 | 1 | 1 | Ignition of gas. |
| August..... | 28 | 1:04 | 10241 Avenue L..... | 1 | 1 | 1 | Ignition of gasoline in stove. |
| August..... | 29 | 11:06 | 358 Dearborn street..... | 1 | 1 | 1 | Explosion of chemicals. |
| September..... | 6 | 10:45 | 282 State street..... | 1 | 1 | 1 | Explosion of benzine. |
| September..... | 9 | 10:49 | 190 Dearborn avenue..... | 1 | 1 | 1 | Extinguishing fire caused by careless use of matches. |
| September..... | 10 | 6:31 | 2944 South Park avenue..... | 1 | 1 | 2 | Explosion of gasoline stove. |
| September..... | 17 | 6:59 | Sacramento and Chicago avenues | 2 | 1 | 2 | Railroad wreck. |
| September..... | 23 | 6:15 | 213 W. Twelfth street..... | 1 | 1 | 1 | Explosion of gasoline stove. |
| September..... | 25 | 10:02 | 230 N. Clark street..... | 1 | 1 | 1 | Explosion of gasoline stove. |
| September..... | 25 | 6:25 | 725 Dania avenue..... | 1 | 1 | 1 | Ignition of gasoline. |
| October..... | 2 | 7:30 | 4100 Emerald avenue..... | 1 | 1 | 1 | Lighting fire with gasoline. |
| October..... | 9 | 9:32 | 1688 Milwaukee avenue..... | 1 | 1 | 1 | Spontaneous combustion. |
| October..... | 10 | 12:27 | 9020 Houston avenue..... | 1 | 1 | 1 | Suffocated by smoke from boiler furnace. |
| October..... | 11 | 8:33 | 2200 State street..... | 1 | 1 | 1 | |

CASUALTIES TO CITIZENS AT FIRES FOR THE YEAR ENDING DECEMBER 31, 1896—Continued.

| DATE. | | TIME. | | LOCATION. | | Persons Injured. | | | Extent of Injury. | | | CAUSE. |
|-----------|------|-------|-------|--|-------|------------------|--------|-----------|-------------------|----------|--------|---|
| Month. | Day. | A. M. | P. M. | | | Men | Women. | Children. | Slight. | Serious. | Fatal. | |
| October. | 15 | ..... | 1:47 | 118 N. Clark street | ..... | 1 | 1 | 1 | 1 | 1 | 1 | Explosion of gasoline stove. |
| October. | 26 | ..... | 7:56 | 2018 Wabash avenue | ..... | 1 | 1 | 1 | 1 | 1 | 1 | Burning building, cause unknown. |
| October. | 29 | 7:24 | ..... | 220 N. Clark street | ..... | 1 | 1 | 1 | 1 | 1 | 1 | Explosion of gasoline stove. |
| November | 6 | ..... | 5:54 | 296 W. Lake street | ..... | 1 | 1 | 1 | 1 | 1 | 1 | Lamp upset |
| November | 12 | ..... | 3:07 | 2908 Armour avenue | ..... | 1 | 1 | 1 | 1 | 1 | 1 | Explosion of gas. |
| November | 27 | ..... | 2:30 | 701 120th street | ..... | 1 | 1 | 1 | 1 | 1 | 1 | Explosion of gasoline stove. |
| November | 29 | ..... | 3:08 | 51 E. Twenty-second street | ..... | 1 | 1 | 1 | 1 | 1 | 1 | Carelessness with matches. |
| December. | 2 | ..... | 12:30 | Fifty-third street and Armitage avenue | ..... | 1 | 1 | 1 | 1 | 1 | 1 | Playing with matches while locked in house alone. |
| December. | 7 | ..... | 4:05 | 317 Aberdeen street | ..... | 1 | 1 | 1 | 1 | 1 | 1 | Playing with matches. |
| December. | 7 | ..... | 7:02 | 5510 Green street | ..... | 1 | 1 | 1 | 1 | 1 | 1 | Explosion of gasoline stove. |
| December. | 8 | 10:40 | ..... | 399 W. Sixteenth street | ..... | 1 | 1 | 1 | 1 | 1 | 1 | Explosion of gasoline stove. |
| December. | 8 | ..... | 4:41 | 129 S. Western avenue | ..... | 1 | 1 | 1 | 1 | 1 | 1 | Accidental ignition of match. |
| December. | 9 | ..... | 4:12 | Fortieth and Laurel streets | ..... | 2 | 1 | 1 | 1 | 1 | 1 | Explosion of gas. |
| December. | 18 | ..... | 12:45 | 6652 State street | ..... | 1 | 1 | 1 | 1 | 1 | 1 | Explosion of gasoline stove. |
| December. | 29 | ..... | 4:25 | 3462 Halsted street | ..... | 1 | 1 | 1 | 1 | 1 | 1 | Careless use of matches. |
| | | | | Total | ..... | 49 | 38 | 15 | 48 | 26 | 28 | |

PERSONS IN PERIL RESCUED BY MEMBERS OF THE DEPARTMENT FOR THE YEAR
ENDING DECEMBER 31, 1896.

| DATE. | TIME. | | LOCATION. | Persons Rescued. | | REMARKS. | BY WHOM RESCUED. |
|--------------------|-------|-------|--|------------------|-----------|---------------------------|---|
| | Day | A. M. | | Men. | Children. | | |
| January | 1 | 5:41 | 9 and 10 Park Row | 1 | 1 | 4th floor, burning bldg. | H. & L. Co. No. 9. |
| January | 11 | 10:45 | 10701 Hoxie avenue | 1 | 1 | Burning cottage | Hose Co. No. 1. |
| January | 24 | 10:08 | 169 Dearborn street | 3 | 1 | 6th floor, burning bldg. | H. & L. Co. No. 1. |
| January | 24 | 10:08 | 169 Dearborn street | 1 | 1 | Upper floors | H. & L. Co. No. 9. |
| February | 6 | 4:37 | 431 Forty first street | 1 | 3 | 2d floor, burning bldg. | H. & L. Co. No. 11. |
| February | 12 | 4:08 | 74 and 76 Twenty-sixth st. | 1 | 1 | 2d floor, burning bldg. | H. & L. Co. No. 4—Eng. Co. No. 8. |
| February | 19 | 6:09 | 2830 State street | 1 | 1 | 2d floor, burning bldg. | { Chas. P. Becker, Pipeman, Eng. Co. No. 16. |
| February | 22 | 4:07 | 1732 Diversey boulevard | 1 | 6 | 2d floor, burning bldg. | { Eng. Co. No. 55—H. & L. Co. No. 21. |
| March | 20 | 7:11 | 403 N. Clark street | 3 | 3 | 4th floor, burning bldg. | { Peter Geis, Truckman, H. & L. Co. No. 10. |
| March | 23 | 4:53 | 3715 Langley avenue | 1 | 1 | 3d floor, burning bldg. | { H. & L. Co. No. 11. |
| May | 14 | 11:05 | 66 Polk street | 1 | 1 | 2d floor, burning bldg. | { H. & L. Co. No. 1. |
| May | 15 | 1:10 | 338 Thirtieth street | 3 | 1 | 2d floor, burning bldg. | { Eng. Co. No. 16. |
| May | 24 | 7:43 | 148 Townsend street | 1 | 1 | 2d floor, burning bldg. | { Lambert Beck, Truckman, H. & L. Co. No. 3. |
| June | 4 | 3:00 | In front of company quarters | 1 | 1 | Runaway horse | { Allen T. Courser, Truckman, H. & L. Co. No. 24. |
| June | 21 | 9:30 | North ave. E. of Larrabee st. | 1 | 1 | Runaway horse | { Peter Geis, Truckman, H. & L. Co. No. 10. |
| July | 5 | 1:08 | 246 W. Chicago avenue | 3 | 3 | 2d floor, burning bldg. | { H. & L. Co. No. 19. |
| August | 1 | 3:00 | 289 Forty-third street | 2 | 1 | 2d floor, burning bldg. | { H. & L. Co. No. 15. |
| August | 2 | 3:02 | 3128 Cottage Grove avenue | 1 | 1 | 3d floor, burning bldg. | { Charles Buerger, Captain, Eng. Co. No. 9, assisted by H. & L. Co. No. 4 and H. & L. Co. No. 11. |

PERSONS IN PERIL RESCUED BY MEMBERS OF THE DEPARTMENT FOR THE YEAR
ENDING DECEMBER 31, 1896—Continued.

| DATE. | | TIME. | | LOCATION. | Persons Rescued. | | | REMARKS. | BY WHOM RESCUED. |
|----------|------|-------|-------|-----------------------------|------------------|--------|-----------|---------------------------------|--|
| Month. | Day. | A. M. | P. M. | | Men. | Women. | Children. | | |
| August | 10 | ..... | 2:10 | N. branch of Chicago river. | 1 | ..... | ..... | Drowning man | Eng. Co. No. 71. |
| August | 29 | ..... | 1:25 | 930 W. Van Buren street | 1 | ..... | ..... | Roof of burning bldg. | H. & L. Co. No. 12. |
| October | 10 | 12:27 | ..... | 9020 Huston avenue | 1 | ..... | ..... | Attic of burning bldg. | { Edward Carey, Driver, H. & L. Co. No. 17. |
| October | 25 | 3:17 | ..... | 475 Elston avenue | 1 | ..... | ..... | Basem't, burning bldg. | Eng. Co. No. 20. |
| November | 6 | ..... | 5:54 | 296 W. Lake street | 1 | ..... | ..... | 2d floor, burning bldg. | Eng. Co. No. 34. |
| November | 10 | ..... | 4:49 | 97 W. Madison street | 3 | 1 | ..... | 2d and 3d floor, burning bldg. | { 2d Asst. Fire Marshal John Campion assisted by H. & L. Co. No. 2. |
| November | 16 | ..... | 8:18 | 140 Forquer street | 1 | ..... | ..... | 2d floor, burning bldg. | H. & L. Co. No. 2. |
| November | 26 | 12:06 | ..... | 2623 Wabash avenue | ..... | 1 | ..... | 2d floor, burning bldg. | H. & L. Co. No. 4. |
| December | 3 | 4:14 | ..... | 4 River street | 1 | ..... | ..... | 4th floor, burning bldg. | H. & L. Co. No. 3. |
| December | 20 | 4:33 | ..... | 2216 Wabash avenue | 4 | 9 | ..... | 3d and 4th floor, burning bldg. | H. & L. Co. No. 4. |
| Total | | | | | 27 | 38 | 6 | | |

WORK DONE BY COMPANIES.

The following table shows the number of alarms responded to, the number of miles traveled, the number of fires at which work was done, the number of hours worked by each company and the number of fires discovered by the members of said companies during the year 1896:

| COMPANY. | No. of Alarms Responded to. | No. of Miles Traveled. | No. of Fires Performed Duty at. | Time Worked. | | No. Fires Discovered by Members. |
|------------------------------------|--------------------------------|---------------------------|------------------------------------|-----------------|----------|-------------------------------------|
| | | | | Hours. | Minutes. | |
| Water Tower..... | 191 | 300 | 9 | 25 | 15 | .... |
| Engine Company No. 1..... | 267 | 411 | 63 | 92 | 05 | 1 |
| Engine Company No. 2..... | 234 | 475 | 34 | 46 | 15 | 1 |
| Engine Company No. 3..... | 294 | 476 | 56 | 101 | 45 | 2 |
| Engine Company No. 4..... | 214 | 411 | 39 | 61 | 35 | 3 |
| Engine Company No. 5..... | 413 | 556 | 63 | 116 | 35 | 1 |
| Engine Company No. 6..... | 435 | 602 | 135 | 66 | 55 | 4 |
| Engine Company No. 7..... | 493 | 637 | 79 | 55 | 20 | 2 |
| Engine Company No. 8..... | 266 | 554 | 89 | 101 | 10 | 2 |
| Engine Company No. 9..... | 261 | 522 | 54 | 61 | 15 | 1 |
| Engine Company No. 10..... | 304 | 462 | 44 | 93 | 20 | 1 |
| Engine Company No. 11..... | 190 | 208 | 67 | 104 | 10 | 1 |
| Engine Company No. 12..... | 289 | 474 | 58 | 65 | .... | .... |
| Engine Company No. 13..... | 232 | 259 | 56 | 111 | .... | 1 |
| Engine Company No. 14..... | 374 | 640 | 56 | 98 | 45 | 3 |
| Engine Company No. 15..... | 177 | 320 | 10 | 30 | 30 | .... |
| Engine Company No. 16..... | 318 | 576 | 90 | 95 | 05 | 3 |
| Engine Company No. 17..... | 395 | 560 | 69 | 129 | 15 | 1 |
| Engine Company No. 17—Reserve..... | 39 | 119 | 6 | 39 | 35 | .... |
| Engine Company No. 18..... | 512 | 745 | 78 | 80 | 05 | 2 |
| Engine Company No. 19..... | 245 | 505 | 60 | 75 | 35 | .... |
| Engine Company No. 20..... | 192 | 408 | 42 | 48 | 20 | 2 |
| Engine Company No. 21..... | 281 | 441 | 70 | 92 | 35 | .... |
| Engine Company No. 22..... | 164 | 472 | 39 | 39 | 25 | .... |
| Engine Company No. 23..... | 219 | 396 | 44 | 31 | 35 | .... |
| Engine Company No. 24..... | 212 | 402 | 77 | 66 | 20 | 1 |
| Engine Company No. 25..... | 197 | 316 | 38 | 34 | 15 | .... |
| Engine Company No. 26..... | 450 | 463 | 55 | 62 | 15 | 2 |
| Engine Company No. 27..... | 277 | 418 | 63 | 82 | 55 | 1 |

| COMPANY. | No. of Alarms Responded to. | No. of Miles Traveled. | No. of Fires Performed Duty at. | Time Worked. | | No. Fires Discovered by Members. |
|--------------------------------------|--------------------------------|---------------------------|------------------------------------|-----------------|----------|-------------------------------------|
| | | | | Hours. | Minutes. | |
| Engine Company No. 28..... | 120 | 263 | 23 | 32 | ... | 4 |
| Engine Company No. 29..... | 186 | 397 | 36 | 51 | 15 | 1 |
| Engine Company No. 30..... | 294 | 543 | 83 | 79 | 50 | ... |
| Engine Company No. 31..... | 285 | 591 | 59 | 64 | 40 | ... |
| Engine Company No. 32..... | 238 | 355 | 26 | 99 | 05 | ... |
| Engine Company No. 33..... | 139 | 276 | 42 | 49 | 55 | 1 |
| Engine Company No. 34..... | 399 | 667 | 121 | 109 | 45 | ... |
| Engine Company No. 35..... | 217 | 365 | 69 | 47 | 45 | 3 |
| Engine Company No. 36..... | 77 | 170 | 17 | 12 | 30 | ... |
| Engine Company No. 37—Fire-Boat..... | 124 | 188 | 33 | 67 | 45 | ... |
| Engine Company No. 38..... | 31 | 67 | 15 | 12 | 30 | ... |
| Engine Company No. 39..... | 115 | 331 | 23 | 38 | 45 | ... |
| Engine Company No. 40..... | 236 | 240 | 53 | 137 | 20 | ... |
| Engine Company No. 41—Fire-Boat..... | 48 | 95 | 8 | 15 | 05 | 1 |
| Engine Company No. 42..... | 309 | 526 | 85 | 114 | ... | 5 |
| Engine Company No. 43..... | 113 | 241 | 48 | 58 | 05 | 4 |
| Engine Company No. 44..... | 86 | 221 | 36 | 54 | 40 | ... |
| Engine Company No. 45..... | 215 | 415 | 55 | 77 | 10 | 3 |
| Engine Company No. 46..... | 117 | 239 | 46 | 56 | 10 | 16 |
| Engine Company No. 47..... | 89 | 237 | 43 | 53 | 35 | 3 |
| Engine Company No. 48..... | 291 | 637 | 57 | 79 | 10 | 1 |
| Engine Company No. 49..... | 126 | 238 | 40 | 42 | 45 | 11 |
| Engine Company No. 50..... | 264 | 593 | 70 | 79 | 25 | 2 |
| Engine Company No. 51..... | 235 | 661 | 102 | 103 | 05 | 15 |
| Engine Company No. 52..... | 133 | 242 | 33 | 30 | 10 | 2 |
| Engine Company No. 53..... | 71 | 144 | 26 | 22 | 45 | ... |
| Engine Company No. 54..... | 83 | 385 | 19 | 23 | 20 | 1 |
| Engine Company No. 55..... | 125 | 228 | 56 | 43 | ... | ... |
| Engine Company No. 56..... | 99 | 310 | 20 | 35 | ... | 2 |
| Engine Company No. 57..... | 166 | 399 | 37 | 38 | 30 | 2 |
| Engine Company No. 58—Fire-Boat..... | 14 | 28 | 2 | 1 | 40 | ... |
| Engine Company No. 59..... | 134 | 253 | 38 | 47 | 10 | 2 |
| Engine Company No. 60..... | 109 | 259 | 30 | 30 | 25 | ... |
| Engine Company No. 61..... | 224 | 583 | 48 | 90 | 57 | 1 |
| Engine Company No. 62..... | 40 | 101 | 23 | 23 | 40 | 3 |
| Engine Company No. 63..... | 120 | 351 | 34 | 32 | 40 | 1 |
| Engine Company No. 64..... | 141 | 450 | 42 | 59 | 30 | 7 |
| Engine Company No. 65..... | 54 | 143 | 28 | 34 | 40 | 1 |
| Engine Company No. 66..... | 122 | 303 | 24 | 27 | 10 | ... |
| Engine Company No. 67..... | 51 | 105 | 37 | 46 | 05 | 12 |
| Engine Company No. 68..... | 29 | 77 | 18 | 37 | 15 | 4 |
| Engine Company No. 69..... | 36 | 130 | 15 | 20 | 05 | ... |
| Engine Company No. 70..... | 39 | 92 | 11 | 12 | 45 | 2 |
| Engine Company No. 71—Fire-Boat..... | 100 | 231 | 36 | 166 | ... | ... |
| Engine Company No. 72..... | 103 | 332 | 36 | 54 | 20 | 6 |
| Engine Company No. 73..... | 54 | 171 | 19 | 22 | 25 | 3 |
| Engine Company No. 74..... | 66 | 247 | 12 | 14 | 15 | 1 |
| Engine Company No. 75..... | 33 | 74 | 20 | 28 | 40 | 9 |

| COMPANY. | No. of Alarms Responded to. | No. of Miles Traveled. | No. of Fires Performed Duty at. | Time Worked. | | No. Fires Discovered by Members. |
|--------------------------------------|--------------------------------|---------------------------|------------------------------------|-----------------|----------|-------------------------------------|
| | | | | Hours. | Minutes. | |
| Engine Company No. 76..... | 61 | 149 | 27 | 34 | 35 | 2 |
| Engine Company No. 77..... | 33 | 78 | 18 | 29 | 05 | 2 |
| Engine Company No. 78..... | 66 | 176 | 13 | 15 | 55 | ... |
| Engine Company No. 79..... | 20 | 46 | 14 | 13 | ... | 2 |
| Engine Company No. 80..... | 45 | 89 | 14 | 17 | 20 | 3 |
| Engine Company No. 81 <i>a</i> | 11 | 56 | 3 | 4 | 50 | ... |
| Hook and Ladder Company No. 1..... | 248 | 233 | 152 | 126 | 30 | 1 |
| Hook and Ladder Company No. 2..... | 373 | 528 | 237 | 178 | 45 | 2 |
| Hook and Ladder Company No. 3..... | 332 | 428 | 222 | 176 | 30 | 1 |
| Hook and Ladder Company No. 4..... | 292 | 609 | 207 | 157 | 25 | 1 |
| Hook and Ladder Company No. 5..... | 581 | 878 | 314 | 186 | 40 | 1 |
| Hook and Ladder Company No. 6..... | 315 | 350 | 174 | 185 | 10 | ... |
| Hook and Ladder Company No. 7..... | 303 | 565 | 139 | 114 | 20 | 3 |
| Hook and Ladder Company No. 8..... | 163 | 454 | 72 | 58 | 50 | 3 |
| Hook and Ladder Company No. 9..... | 245 | 341 | 125 | 144 | 15 | ... |
| Hook and Ladder Company No. 10..... | 263 | 498 | 145 | 113 | 50 | ... |
| Hook and Ladder Company No. 11..... | 350 | 718 | 197 | 186 | 05 | ... |
| Hook and Ladder Company No. 12..... | 195 | 395 | 96 | 83 | 10 | 3 |
| Hook and Ladder Company No. 13..... | 138 | 538 | 88 | 94 | 45 | ... |
| Hook and Ladder Company No. 14..... | 376 | 625 | 184 | 157 | 10 | 1 |
| Hook and Ladder Company No. 15..... | 192 | 386 | 113 | 100 | 15 | 3 |
| Hook and Ladder Company No. 16..... | 157 | 589 | 97 | 106 | 15 | 3 |
| Hook and Ladder Company No. 17..... | 145 | 351 | 106 | 90 | 30 | 16 |
| Hook and Ladder Company No. 18..... | 330 | 797 | 189 | 164 | 05 | ... |
| Hook and Ladder Company No. 19..... | 297 | 397 | 181 | 137 | 30 | 10 |
| Hook and Ladder Company No. 20..... | 156 | 558 | 124 | 129 | 25 | ... |
| Hook and Ladder Company No. 21..... | 202 | 594 | 91 | 71 | 10 | 9 |
| Hook and Ladder Company No. 22..... | 38 | 168 | 11 | 7 | 10 | ... |
| Hook and Ladder Company No. 23..... | 26 | 108 | 20 | 37 | 20 | 1 |
| Hook and Ladder Company No. 24..... | 52 | 222 | 31 | 32 | 25 | 5 |
| Hook and Ladder Company No. 25..... | 11 | 22 | 9 | 11 | 30 | ... |
| Hook and Ladder Company No. 26..... | 95 | 325 | 50 | 58 | 35 | ... |
| Hook and Ladder Company No. 27..... | 65 | 139 | 19 | 19 | 20 | ... |
| Hose Company No. 1 <i>b</i> | 58 | 292 | 21 | 27 | 45 | 4 |
| Hose Company No. 3..... | 6 | 3 | 2 | 5 | 55 | ... |
| Total..... | .... | 40,015 | .... | 7,674 | 12 | 240 |

a Organized October 19, 1896.*b* Discontinued October 19, 1896.

EXHIBIT "C."

REPORT OF THE FIRST ASSISTANT FIRE
MARSHAL AND DEPARTMENT
INSPECTOR.

CHICAGO, ILL., January 1, 1897.

D. J. SWENIE, ESQ.,

Fire Marshal and Chief of Brigade.

DEAR SIR :—I herewith submit my report of the condition of the department for the year ending December 31, 1896 :

BUILDINGS.

The buildings of the department are in fair condition.

APPARATUS.

The apparatus of the department in service consists of 82 steam fire engines, including 4 fire-boats, 10 extension, 10 straight frame and 6 combination chemical engines, hook and ladder trucks and hose reels. 9 two-wheel, 2 four-wheel and 4 combined chemical engines and hose carriages. 39 hose wagons, 21 four-wheel hose carriages and 1 water tower, all of which are, with a few exceptions, in good condition.

APPARATUS MANNED BY VOLUNTEERS.

4 hand engines, 7 two-wheel hose carts, 3 hand hook and ladder trucks, 4 hand chemical engines.

STATEMENT OF HOSE.

| | |
|---|-------------|
| 2½-inch rubber hose, in good condition..... | 11,957 feet |
| 2½-inch rubber hose, in fair condition..... | 6,056 feet |
| 2½-inch rubber hose, in poor condition..... | 5,372 feet |
| 3½ inch rubber hose, in fair condition..... | 348 feet |
| 3½-inch rubber hose, in poor condition..... | 33 feet |
| 1-inch rubber hose, in good condition..... | 4,050 feet |
| 1-inch rubber hose, in fair condition..... | 2,556 feet |
| 1-inch rubber hose, in poor condition..... | 2,144 feet |
| 4-inch rubber hose, in fair condition..... | 85 feet |
| 2½-inch cotton hose, in good condition..... | 84,371 feet |
| 2½-inch cotton hose, in fair condition..... | 26,033 feet |
| 2½-inch cotton hose, in poor condition..... | 9,772 feet |
| 3½-inch cotton hose, in good condition..... | 12,912 feet |
| 3½-inch cotton hose, in fair condition..... | 1,944 feet |
| 3½-inch cotton hose, in poor condition..... | 77 feet |

HOSE IN RESERVE.

| | |
|---|--------------|
| 2½-inch cotton hose, in good condition..... | 17,700 feet |
| 3½-inch cotton hose, in good condition..... | 4,150 feet |
| 2½-inch rubber hose, in good condition..... | 3,150 feet |
| 1-inch rubber hose, in good condition..... | 500 feet |
| Total serviceable hose..... | 175,812 feet |
| Total condemned hose..... | 17,398 feet |

DRILL OF ENGINE COMPANIES.

| Companies. | Minutes. | Seconds. | Distance Traveled. |
|--------------------|--------------|------------------------|-----------------------|
| Engine No. 1..... | 1..... | 15 $\frac{3}{4}$ | 260 feet |
| Engine No. 2..... | 2..... | 21 $\frac{1}{4}$ | 83 feet |
| Engine No. 3..... | 3..... | 50..... | 65 feet |
| Engine No. 4..... | 4..... | 28 $\frac{1}{2}$ | 123 feet |
| Engine No. 5..... | 3..... | 31..... | 66 feet |
| Engine No. 6..... | 2..... | 46..... | 75 feet |
| Engine No. 7..... | 2..... | 10..... | 60 feet |
| Engine No. 8..... | 5..... | 42..... | 75 feet |
| Engine No. 9..... | 3..... | 9 $\frac{1}{2}$ | 75 feet |
| Engine No. 10..... | 2..... | 21..... | 90 feet |
| Engine No. 11..... | 5..... | 43..... | 70 feet |
| Engine No. 12..... | 1..... | 47..... | 75 feet |
| Engine No. 13..... | 2..... | 25..... | 64 feet |
| Engine No. 14..... | Sub. Engine. | | |
| Engine No. 15..... | 2..... | 20 $\frac{3}{4}$ | 75 feet |
| Engine No. 16..... | 1..... | 40 $\frac{1}{2}$ | 110 feet |
| Engine No. 17..... | 8..... | 50..... | 71 feet |
| Engine No. 18..... | 2..... | 42..... | 112 feet |
| Engine No. 19..... | 2..... | 50..... | 98 feet |
| Engine No. 20..... | 4..... | ..... | 66 feet |
| Engine No. 21..... | 1..... | 55..... | 198 feet |
| Engine No. 22..... | 2..... | 52..... | 115 feet |
| Engine No. 23..... | 2..... | 20..... | 110 feet |
| Engine No. 24..... | 7..... | 48..... | 135 feet |
| Engine No. 25..... | 1..... | 50..... | 350 feet |
| Engine No. 26..... | 5..... | 15..... | 70 feet |

DRILL OF ENGINE COMPANIES—CONTINUED.

| Companies. | Minutes. | Seconds. | Distance Traveled. |
|--------------------|------------------------|----------|-----------------------|
| Engine No. 27..... | 3..... | 20 | 136 feet |
| Engine No. 28.... | 1..... | 52 | 109 feet |
| Engine No. 29..... | 3..... | 2¼ | 300 feet |
| Engine No. 30..... | 3..... | 30 | 72 feet |
| Engine No. 31..... | 3..... | 37 | 240 feet |
| Engine No. 32..... | 4..... | 16 | 476 feet |
| Engine No. 33..... | 8..... | 2 | 65 feet |
| Engine No. 34..... | 2..... | 41 | 80 feet |
| Engine No. 35..... | 3..... | ..... | 95 feet |
| Engine No. 36..... | 4..... | 18 | 70 feet |
| Engine No. 37..... | Fire-Boat. | | |
| Engine No. 38..... | 4..... | 37 | 78 feet |
| Engine No. 39..... | 2..... | 18 | 75 feet |
| Engine No. 40..... | 3..... | 15 | 140 feet |
| Engine No. 41..... | Fire-Boat. | | |
| Engine No. 42..... | 2..... | 16 | 160 feet |
| Engine No. 43..... | 5..... | ¼ | 50 feet |
| Engine No. 44..... | 2..... | 40 | 85 feet |
| Engine No. 45..... | 1..... | 36 | 150 feet |
| Engine No. 46..... | 2..... | 10 | 115 feet |
| Engine No. 47..... | 1..... | 51 | 121 feet |
| Engine No. 48..... | 2..... | 12 | 85 feet |
| Engine No. 49..... | 4..... | 6 | 98 feet |
| Engine No. 50..... | Unable to raise steam. | | |
| Engine No. 51..... | 7..... | 9 | 275 feet |
| Engine No. 52..... | 2..... | 56 | 83 feet |
| Engine No. 53..... | 5..... | 21 | 97 feet |

DRILL OF ENGINE COMPANIES—CONTINUED.

| Companies. | Minutes. | Seconds. | Distance Traveled. |
|--------------------|------------|------------------------|--------------------|
| Engine No. 54..... | 4..... | 11 $\frac{1}{4}$ | 77 feet |
| Engine No. 55..... | 1..... | 52 $\frac{1}{4}$ | 70 feet |
| Engine No. 56..... | 4..... | 5 | 100 feet |
| Engine No. 57..... | 17..... | 10 | 80 feet |
| Engine No. 58..... | Fire-Boat. | | |
| Engine No. 59..... | 4..... | 24 | 75 feet |
| Engine No. 60..... | 2..... | 46 $\frac{1}{2}$ | 307 feet |
| Engine No. 61..... | 3..... | 54 $\frac{1}{4}$ | 456 feet |
| Engine No. 62..... | 3..... | 14 $\frac{1}{4}$ | 138 feet |
| Engine No. 63..... | 3..... | 50 | 142 feet |
| Engine No. 64..... | 4..... | 2 $\frac{3}{4}$ | 75 feet |
| Engine No. 65..... | 2..... | 58 | 75 feet |
| Engine No. 66..... | 3..... | 35 | 70 feet |
| Engine No. 67..... | 3..... | 59 | 150 feet |
| Engine No. 68..... | 5..... | $\frac{1}{2}$ | 62 feet |
| Engine No. 69..... | 5..... | $\frac{1}{4}$ | 55 feet |
| Engine No. 70..... | 6..... | 47 | 100 feet |
| Engine No. 71..... | Fire-Boat. | | |
| Engine No. 72..... | 3..... | 44 | 66 feet |
| Engine No. 73..... | 4..... | 2 | 60 feet |
| Engine No. 74..... | 3..... | 33 | 37 feet |
| Engine No. 75..... | 4..... | 10 | 110 feet |
| Engine No. 76..... | 4..... | $\frac{1}{2}$ | 46 feet |
| Engine No. 77..... | 8..... | 35 | 126 feet |
| Engine No. 78..... | 3..... | 12 | 100 feet |
| Engine No. 79..... | 6..... | 11 | 46 feet |
| Engine No. 80..... | 2..... | 56 | 290 feet |
| Engine No. 81..... | 2..... | 39 | 75 feet |

DRILL OF HOOK AND LADDER COMPANIES.

| Companies. | Minutes. | Seconds. | Distance Traveled. | Raising Extension Ladder. |
|---------------------------|----------|------------------|--------------------|---------------------------|
| Hook and Ladder No. 1... | 1.... | 25 |197 feet.... | 65 feet |
| Hook and Ladder No. 2... | 1.... | 50 |140 feet.... | 65 feet |
| Hook and Ladder No. 3... | 1.... | 37 |150 feet.... | 65 feet |
| Hook and Ladder No. 4... | 2.... | 43 |225 feet.... | 65 feet |
| Hook and Ladder No. 5... | 1.... | 23 |180 feet.... | 65 feet |
| Hook and Ladder No. 6... | 1.... | 37 |150 feet.... | 65 feet |
| Hook and Ladder No. 7... | 1.... | 52 |170 feet.... | 65 feet |
| Hook and Ladder No. 8... | 2.... | 8 |115 feet.... | 65 feet |
| Hook and Ladder No. 9... | 2.... | 5 |200 feet.... | 65 feet |
| Hook and Ladder No. 10... | 1.... | 23 $\frac{3}{4}$ |100 feet.... | 65 feet |
| Hook and Ladder No. 11... | 1.... | 36 $\frac{1}{4}$ |125 feet.... | 65 feet |
| Hook and Ladder No. 12... | 1.... | 44 |175 feet.... | 65 feet |
| Hook and Ladder No. 13... | 1.... | 45 |150 feet.... | 65 feet |
| Hook and Ladder No. 14... | 2.... | 8 |150 feet.... | 65 feet |
| Hook and Ladder No. 15... | 1.... | 36 |150 feet.... | 65 feet |
| Hook and Ladder No. 16... | 1.... | 2 |169 feet.... | 65 feet |
| Hook and Ladder No. 17... | 1.... | 18 |125 feet.... | 65 feet |
| Hook and Ladder No. 18... | 5.... | 5 |150 feet.... | 65 feet |
| Hook and Ladder No. 19... | 2.... | 30 |145 feet.... | 50 feet |
| Hook and Ladder No. 20... | 1.... | 38 |100 feet.... | 65 feet |
| Hook and Ladder No. 21... | 1.... | 52 |100 feet.... | 65 feet |
| Hook and Ladder No. 22... | 1.... | 30 | 70 feet.... | 36 feet |
| Hook and Ladder No. 23... | 1.... | 10 | 56 feet.... | 36 feet |
| Hook and Ladder No. 24... | 1.... | 6 | 85 feet.... | 36 feet |
| Hook and Ladder No. 25... | 1.... | 51 |100 feet.... | 36 feet |
| Hook and Ladder No. 26... | 1.... | 40 |156 feet.... | 65 feet |

Respectfully submitted,

W. H. MUSHAM,

First Assistant Fire Marshal.

EXHIBIT "D."

REPORT OF THE ASSISTANT FIRE MAR-
SHAL IN CHARGE OF THE DEPART-
MENT REPAIR SHOPS.

CHICAGO, ILL., January 1, 1897.

D. J. SWENIE, Esq.,

Fire Marshal and Chief of Brigade.

DEAR SIR:—I herewith submit to you my twentieth annual report of the work done at the department repair shops for the year 1896.

The following engines received a general overhauling and were painted: Nos. 20, 24, 28, 29, 33, 35, 39, 52 and 65.

A new boiler was placed in engine No. 7, which was sent to Engine Company No. 50 to replace the old engine of that company, which was worn out. Engine Company No. 7 received the engine of Engine Company No. 25, which was replaced by a new engine. Engine No. 34 was replaced by a new engine. Engine No. 61 was replaced by Engine No. 34, and No. 61 is now being used as an extra engine.

The following engines should receive new boilers in the coming year, as the boilers have been in service many years and are nearly worn out: Nos. 4, 8, 11, 14, 31 and 65.

Engines Nos. 24, 33 and 56 should be replaced by new modern engines. These engines have been in the service for more than 25 years.

Engine No. 59 was replaced by the engine formerly used by Engine Company No. 1, the same having received a general overhauling, new boiler, etc.

The engine used formerly by Engine Company No. 10 was also rebuilt and a new boiler put in, and it is now being used as an extra engine.

The following hook and ladder trucks received extensive repairs: Nos. 8, 9 and 10. The truck used formerly by Hook and Ladder Company No. 21 was rebuilt and painted and placed in service in Hook and Ladder Company No. 24.

The trucks of Hook and Ladder Companies Nos. 22, 23 and 25 should be replaced by new and larger trucks.

The truck used by Hook and Ladder Company No. 5 should be rebuilt and improved with a new extension ladder as soon as possible.

The following hose wagons were rebuilt, several of them receiving new running gears of the improved pattern: Nos. 3, 5, 6, 9, 12, 15, 16, 25, 26, 30, 34, 35, 48 and 51.

Four new hose wagons are in process of construction at the shops at present and will be placed in service as soon as finished.

I would recommend that at least six more be purchased or built as soon as possible so as to replace the cumbersome and expensive hose carts that are now in the service.

The Fire-Boat Fire Queen (Engine No. 71) received extensive repairs last spring, the boiler being raised 12 inches and a new fire box put in. The machinery was overhauled and put in first-class condition.

The boiler in the Fire-Boat Chicago received a general overhauling. A new fire box and new flues were added. This boiler has been in constant service for the past 12 years and should be replaced by a new one as soon as an appropriation can be made for the same.

Respectfully submitted,

C. S. PETRIE,

Assistant Fire Marshal

and Superintendent of Machinery.

*EXHIBIT "E."*REPORT OF THE SUPERINTENDENT OF
CITY TELEGRAPH.

CHICAGO, January 1st, 1897.

D. J. SWENIE, Esq.,

Fire Marshal and Chief of Brigade, City Hall.

DEAR SIR:—I herewith submit my twenty-first annual report of the several branches of the City Telegraph Department, being the thirty-second since the introduction of the system.

ALARM STATIONS.

During the year the signal system of the Fire Alarm Telegraph has been increased by 112 street boxes, 1,227 being the number now in service, and, together with the police branch, consisting of 921 public and 395 private boxes, constitute a system of 2,543 alarm stations, exclusive of calls over police and public telephones.

FIRE SIGNALS.

There have been transmitted 3,104 first alarms, 72 second alarms, 18 third alarms, 24 second and third alarms combined, 19 special calls, 2,377 still alarms, making a total of 5,614 alarms during the year.

AERIAL LINES.

To our aerial system we have added 106.18 miles of wire, and placed 227.32 miles for renewals and repairs, a total of 332.5 miles being used. We have taken down fifty miles of old wire on account of underground work and have now 2,630.7 miles of aerial wire in service.

The following table shows a summary of the work on aerial lines during the year :

| | District 1 | District 2 | Total |
|---|------------|------------|--------|
| Additional poles set..... | 156 | 97 | 253 |
| Poles set on account of renewals and repairs | 31 | 104 | 135 |
| Old poles removed on account of underground work .. | 85 | ..... | 85 |
| Old poles removed on account of renewals..... | 172 | 91 | 263 |
| Miles of wire placed additional .. | 66 | 40.18 | 106.18 |
| Miles of wire placed, maintenance and renewals..... | 157 | 70.32 | 227.32 |
| Miles of old wire taken down on account of underground work | 50 | ... .. | 50 |

AERIAL WIRE USED, 1896.

| | Fire Alarm, Miles | Police Alarm, Miles | Total Miles Used |
|---------------------------------------|-------------------|---------------------|------------------|
| Additional, north of 39th street..... | 52 | 14 | 66 |
| Additional, south of 39th street..... | 16.15 | 24.03 | 40.18 |
| Additional, total..... | 68.15 | 38.03 | 106.18 |

| | Fire Alarm, Miles | Police Alarm, Miles | Municipal Telephone | Total Miles Used |
|-------------------------------------|-------------------|---------------------|---------------------|------------------|
| Renewals, north of 39th street..... | 82 | 70 | 5 | 157 |
| Renewals, south of 39th street..... | 31.40 | 31.92 | 7 | 70.32 |
| Renewals, total..... | 113.40 | 101.92 | 12 | 227.32 |

UNDERGROUND.

We have placed underground lead-covered cables on Washington street, from Hook and Ladder Company No. 2's House to Desplaines street, on Desplaines street from Harrison street to Milwaukee avenue, on Milwaukee avenue from Desplaines street to Ashland avenue, and on Harrison street from Jefferson street to Halsted street, making the following additions to the system:

| |
|-----------------------------------|
| 1,692 feet of steel pipe. |
| 7,380 feet of 2 conductor cable. |
| 2,210 feet of 10 conductor cable. |
| 460 feet of 16 conductor cable. |
| 1,337 feet of 20 conductor cable. |
| 6,406 feet of 30 conductor cable. |
| 930 feet of 40 conductor cable. |
| 5,792 feet of 50 conductor cable. |
| 6,059 feet of 60 conductor cable. |

The Municipal Underground System now consists of:

| | |
|---|--------------|
| Conduit | 8,332 feet |
| Two-compartment cast-iron conduit | 1,030 feet |
| Iron pipe laid underground | 102,668 feet |
| Wooden box underground | 1,793 feet |
| Vitrified pipe | 592 feet |
| Manholes | 136 feet |
| Handholes | 23 feet |
| Conductors, 100 | 5,222 feet |
| Conductors, 75 | 6,200 feet |
| Conductors, 60 | 10,659 feet |
| Conductors, 50 | 5,792 feet |
| Conductors, 40 | 1,735 feet |
| Conductors, 36 | 1,121 feet |
| Conductors, 30 | 18,010 feet |

| | |
|---------------------|--------------|
| Conductors, 26..... | 625 feet |
| Conductors, 25..... | 12,086 feet |
| Conductors, 20..... | 1,337 feet |
| Conductors, 16..... | 20,315 feet |
| Conductors, 15..... | 890 feet |
| Conductors, 12..... | 1,200 feet |
| Conductors, 10..... | 15,243 feet |
| Conductors, 8..... | 6,829 feet |
| Conductors, 7..... | 3,082 feet |
| Conductors, 6..... | 3,345 feet |
| Conductors, 5..... | 116,728 feet |
| Conductors, 4..... | 7,586 feet |
| Conductors, 2..... | 16,883 feet |
| Single wire | 380,000 feet |

ELECTRIC REPAIR SHOP.

The working force in this branch of the department remained the same as during the previous year. One piece of machinery was added to the outfit—a foot-power punching press. Of the 1,475 jobs done during the year, 1,055 were on account of telegraph department and 420 on account of the electric light department.

The new work turned out included answer-back keys, battery coppers and zincs, condensers, adjustable telephone supports, springs of all kinds, fire alarm box pipe tops and support blocks, insulating washers and bushings, blue prints, and the preparation of chemical register paper.

A set of five signal line relays and accompanying switches of original design, the metallic parts being principally of aluminum and mounted on slate bases, were made and placed in service at the City Hall office.

A large number of fire and police telegraph instruments were overhauled and refinished, notably: 38 inking registers, 84 chemical registers, 38 Joker relays, 27 sounders, 18 alarm gongs, 12 telephone outfits, 101 fire alarm and 89 police alarm boxes. The outer cases of 828 fire alarm boxes were painted and varnished.

For the electric light department 6 armatures were entirely rewound; 66 commutators and 668 arc lamps were repaired.

Eleven improved "Joker" outfits were purchased, of which 4 were placed in officers' residences and 4 in Fire Department stations, leaving 3 on hand which have been assigned and will be placed in stations shortly, making a total of 53 of these outfits.

During the year 22 portable storage batteries were placed in service for local circuit work, 15 of which were new ones purchased, and 7 of which were on hand at the beginning of the year, making a total of 40 stations and officers' residences now supplied with this type of local battery.

The machinery and tools are in good order, and the stock of materials is fairly well supplied.

POLICE TELEGRAPH.

During the year the system has been increased by the erection of 27 public and 8 private boxes.

A complete set of instruments was installed at the South Englewood station and two circuits built with return wires. Additional telephone lines were

built to connect the residence of A. J. Johnston, private secretary of the Chief of Police, and the dormitory of the department.

The lines between the West Chicago avenue and Central stations, West Chicago avenue and East Chicago avenue stations, Hinman street and Central stations, and Hyde Park and residence of Inspector Fitzpatrick, were made metallic.

Twenty-three nickel-plated tubular transmitter stands, made at the telegraph repair shop, were placed in service. One five-line and one fifteen-line metallic spring jack switch were placed in service at the Addison avenue and Hinman street stations.

New operating tables were built at the Police department shop and placed in service in the Thirty-fifth street, Fiftieth street, South Chicago, Milwaukee avenue, Irving Park, and Lake View Town Hall stations.

The house telephone system was extended to the office of the Superintendent of Street and Alley Cleaning.

For a detailed statement of the services rendered by the police patrol system for the year, your attention is called to the attached extract from the report of the General Superintendent of Police:

SUMMARY OF POLICE ALARM TELEPHONE SERVICES.

| | |
|--|-----------|
| Reports received from policemen in district | 5,248,139 |
| Alarms responded to..... | 62,420 |
| Arrests made | 41,640 |
| Fires attended | 4,825 |
| Miles traveled | 200,385 |
| False Alarms | 1,571 |
| Sick and injured persons taken to hospital..... | 3,299 |
| Sick and injured persons taken home | 2,088 |
| Sick and injured persons taken to station..... | 510 |
| Dead bodies taken to morgue..... | 763 |
| Dead bodies taken to residence | 76 |
| Disturbances suppressed without arrests..... | 2,480 |
| Insane persons cared for | 833 |
| Destitute persons cared for | 716 |
| Prisoners taken to County Jail | 6,648 |
| Prisoners taken to Division Police Court..... | 17,522 |
| Packages stolen, property recovered | 629 |
| Lost children taken to parents | 1,249 |
| Mad or crippled animals killed | 168 |
| Runaway horses overtaken and stopped | 48 |
| Stolen horses recovered | 66 |
| Stolen vehicles recovered | 57 |
| Abandoned children taken to Foundlings' Home.... | 46 |
| Persons rescued from drowning | 22 |
| Inebriates taken to Washingtonian Home | 78 |
| Persons taken to the House of the Good Shepherd .. | 56 |
| Persons taken to the Home of the Friendless | 17 |
| Persons taken to the Erring Woman's Refuge | 43 |
| Persons taken to St. Vincent's Orphan Asylum | 14 |
| Persons taken to St. Joseph's Orphan Asylum | 1 |
| Persons taken to County Agent's Office | 168 |
| Miscellaneous and incidental | 19,176 |

ELECTRIC LIGHTING.

To our electric lighting system we have added one 125-light dynamo, nine manholes, 19,068 feet of steel pipe, 67,095 feet of single conductor electric light wire and cable, and 142 2,000-candle power arc street lamps, and have discontinued four arc lamps, making a net addition of 138 ; 1,254 being the number now in service.

We have placed 100 16-candle power incandescent lamps in the plant at 299-301 South Halsted street. We have completed the lighting with electric lights of the First Ward, and have discontinued all gas and gasoline lamps formerly in service in that Ward. We have also placed a number of arc lamps in the alleys.

The following table shows the number of lights operated in the North, South and West Divisions from City power stations, together with the number added and discontinued during the year :

CITY POWER STATIONS.

| SIDE. | December 31, 1895. | Added, 1896. | Left off, 1896. | TOTAL. |
|-----------------|-----------------------|-----------------|--------------------|--------|
| North | 237 | 3 | ..... | 240 |
| South | 351 | 122 | 4 | 469 |
| West | 528 | 17 | ..... | 545 |
| | 1,116 | 142 | 4 | 1,254 |

ELECTRIC LIGHT INSPECTIONS.

During no previous year have there been more electric motors installed than the year ending December 31, 1896.

The arc lamp installation has only been exceeded by the "World's Fair" year and the year of its preparation, while during the years 1891, 1892, 1893 alone, have there been more incandescent lamps installed than this just ended.

Many improvements, both station and line, have been made by central plant companies during the year, and as a result there was a very healthy growth of electric lighting in several of the outlying residence districts.

Many small outlying installations have required much unnecessary time of the inspector in revisiting, because of certain defective work, which would have been prevented had the parties doing the work been directly under municipal regulations; reference was made to the creation of an ordinance of this character in my last report to you.

The rigor of the department on all inspections is maintained, and such additional requirements have been added to the code as shall best provide for the safety to property and life.

Attached hereto is a condensed report of fires caused by electricity during the year, and of the inspections made.

FIRE DEPARTMENT.

FIRES CAUSED BY ELECTRICITY.

| 1896. | January | February | March | April | May | June | July | August | September | October | November | December | Total | Loss from each cause |
|--|-------------|----------|--------|--------|--------|--------|------|--------|-----------|---------|----------|----------|-------|----------------------|
| Hanger Board, high tension | 1 | | | | | | | | | | | | 1 | |
| Cut high tension under sidewalk | 1 | 1 | | | | | | | | | | | 1 | \$400.00 |
| Window decoration, incan- descent lamp | 1 | 1 | | | | | | | | | 1 | | 2 | \$400.00 |
| Conductor, high tension in building | 1 | 1 | 2 | | 1 | 2 | 3 | 1 | 6 | 1 | 2 | | 22 | \$475.00 |
| Conductor, high tension un- der sidewalk | | | | | 3 | 2 | 3 | | 3 | | 3 | 1 | 18 | |
| Conductor incandescent, in- side building | | | 1 | 1 | | | | | | | | | 1 | |
| Cut-out, high tension on pole | | | 1 | 1 | | | | | | | | | 1 | |
| Conductor, incan., crossed with bell wire | | 1 | | | | | | | | | | | 1 | \$100.00 |
| Conductor, incan., crossed with gas pipe | | | 1 | | | | | 1 | | | | | 2 | \$700.00 |
| Insulating joint, grounded | | | 1 | | | | | | | | | | 1 | |
| Cut-out, low tension loose contact | | | | | 1 | | | | | | | | 1 | \$200.00 |
| Lightning | | | | | 2 | | | | | | | | 2 | |
| Conductors, low tension, un- der sidewalk | | | | | 1 | | | | | | | | 1 | |
| Conductors, low tension, poor contact | | | | | | | | | | | | | 1 | \$500.00 |
| Conductors, low tension, in short circuit | | | | | 1 | | | | | | | | 3 | \$700.00 |
| Conductors, low tension, in wet molding | | | | | | 1 | | | | | | | 1 | |
| Conductors, high tension, nail in cable | | | | | | 1 | 1 | | | | 1 | | 2 | |
| Conductors, high tension on building | | | | | | | 1 | 1 | | | | | 2 | |
| Cut-out, high tension on circuit in fixture | | | | | | | 1 | 2 | | | | | 3 | |
| Conductor, incan., short circuit in fixture | | | | | | | 1 | 1 | | | 2 | | 4 | \$100.00 |
| Conductor, high tension, poor contact | | | | | | | 1 | 1 | | | | | 2 | |
| Rheostat low tension, short circuit, by screw | | | | | | | | | | | 1 | | 1 | |
| Conductor, low tension, in- sulation gnawed by rats | | | | | | | 1 | 1 | | | 1 | | 2 | |
| Flexible cord grounded on iron pipe | | | | | | | 1 | 1 | | | | | 1 | \$300.00 |
| Trolley grounded | | | | | | | | | 1 | | | | 1 | |
| Arc lamp, loose contact | | | | | | | | | | 1 | | | 1 | |
| Heater, trolley car | | | | | | | | | | | 1 | | 1 | |
| Conductors, trolley and light wire crossed | | | | | | | | | | | 1 | | 1 | |
| Conductor, high tension on metal ceiling | | | | | | | | | | | | | 1 | |
| Conductor, trolley crossed with telegraph wire | | | | | | | | | | | | | 1 | |
| Total each month | 6 | 5 | 4 | 6 | 9 | 9 | 11 | 3 | 10 | 3 | 12 | 3 | 81 | \$4,375.00 |
| Loss each month | \$ 1,000.00 | 900.00 | 950.00 | 100.00 | 300.00 | 700.00 | | | | | 25.00 | 400.00 | | \$4,375.00 |

SUMMARY OF ELECTRICAL INSPECTION.

MOTORS INSPECTED.

| YEAR. | Number. | Capacity and Horse Power. |
|-----------------------|---------|---------------------------|
| Previous to 1892..... | 668 | 2,004 |
| 1892..... | 504 | 1,492 |
| 1893..... | 601 | 1,881 |
| 1894..... | 568 | 1,128 |
| 1895..... | 558 | 1,319 |
| 1896..... | 711 | 3,578 |
| Totals..... | 3,610 | 11,402 |

| | |
|---|-----|
| Completed inspections of wiring only during 1896..... | 587 |
| Certificates issued for wiring only during 1896..... | 296 |

ISOLATED PLANTS RE-INSPECTED DURING 1896 AS FOLLOWS:

| ARC LAMPS. | INCANDESCENT LAMPS. | MOTORS. | | GENERATORS. | |
|------------|---------------------|---------|--------------|-------------|--------------|
| | | Number. | Horse Power. | Number. | Horse Power. |
| 410 | 9,774 | 38 | 61 | 42 | 989 |

| | |
|---|-----|
| Isolated plants in progress of re-inspection..... | 195 |
| Isolated plants previous to 1896 | 611 |
| Removed during 1896..... | 16 |
| New installations, 1896 | 74 |
| Isolated plants, January 1, 1897. Total..... | 669 |

STATEMENT OF YEARLY INSPECTION OF ELECTRIC LIGHT
LAMPS, FROM FEBRUARY 14, 1884, TO DECEMBER 31, 1896.

| YEAR. | Number of Arc Lights. | Number of Incandescent Lights. |
|--------------|--------------------------|-----------------------------------|
| 1884 | 1,148 | 1,885 |
| 1885 | 392 | 7,609 |
| 1886 | 479 | 5,225 |
| 1887 | 837 | 5,424 |
| 1888 | 2,369 | 17,717 |
| 1889 | 2,623 | 24,966 |
| 1890 | 2,682 | 39,543 |
| 1891 | 3,974 | 37,913 |
| 1892 | 5,046 | 101,668 |
| 1893 | 6,279 | 150,545 |
| 1894 | 3,604 | 67,593 |
| 1895 | 3,228 | 53,090 |
| 1896 | 4,739 | 80,251 |
| Totals | 37,400 | 643,429 |

NUMBER OF ELECTRIC LIGHTING STATIONS AND LAMPS
IN THE CITY.

| | Number of Stations. | Number of Arc Lamps Operated. | Number of Incandescent Lamps opera- ted equival't of 16-Candle Power. |
|---|------------------------|-------------------------------------|--|
| Commercial Companies, Central Stations..... | 28 | 11,153 | 250,370 |
| Commercial Companies, Isolated Plants..... | 669 | 11,839 | 294,311 |
| City Plants, Street Lighting..... | 3 | 1,254 | ..... |
| City Plants, City Hall and Water Works..... | 4 | 13 | 2,913 |
| Total | 704 | 24,259 | 547,594 |

MUNICIPAL AND BRIDGE TELEPHONE SYSTEMS.

The lines and instruments in service in the various City Offices, the Law, Health, Water, City Engineer and Sewer Departments, House of Correction, Pipe Yards, etc., and the bridge telephone service are in good condition, and the service rendered satisfactory.

We placed 11,000 feet of three-conductor armored submarine cable in the lake at 68th street from the pumping station to the crib, and 10,400 feet of three-conductor armored submarine cable in the lake from the Lake View pumping station to the crib, and connected them with the municipal telephone system.

The following tables show an inventory of the fire alarm telegraph and the number, time and classification of fire alarms received and transmitted during the year 1896 :

INVENTORY CITY TELEGRAPH.

| | | | |
|---|----|---------|----|
| Annunciator, Ammeter and Lightning Arresters . | \$ | 1,490 | 52 |
| Bells | | 30,287 | 28 |
| Boards, central office and terminal boards | | 2,798 | 52 |
| Boxes, fire alarm | | 199,451 | 00 |
| Boxes, police, public and test | | 55,287 | 00 |
| Buzzers and Burglar Alarms | | 77 | 16 |
| Circuit controllers, clocks, chairs and coolers | | 3,089 | 45 |
| Chucks, coils, condensers, chain-drops, cabinets, clips, carpets, etc..... | | 4,603 | 69 |
| Doors, keyless doors, desks and drops | | 18,153 | 25 |
| Engine | | 180 | 00 |

| | |
|--|--------------|
| Gongs, galvanometers, generators and gauges..... | \$ 20,776 40 |
| Joker outfits, Joker repays and keys | 25,250 00 |
| Keys, telegraph, pony, answer back and multipolar. | 256 00 |
| Magnetos..... | 2,366 27 |
| Millimeters, milling and gear cutting, grinding and buffing machines..... | 727 50 |
| Motors and maps..... | 446 50 |
| Push buttons, pole changers, presses and plugs... | 628 45 |
| Relays, registers, repeaters and rheostats | 22,725 92 |
| Scales, spring jackets and sounders..... | 1,025 00 |
| Switches, incandescent lamps | 737 60 |
| Switchboards | 3,696 05 |
| Tools, benches, shelving and tents | 843 83 |
| Telephone standards, testing racks, telephone sets, tables and testing sets | 1,024 10 |
| Vises and voltmeters | 388 46 |
| Wheatstone bridges and galvanometers | 260 00 |
| Underground telegraph system..... | 127,878 52 |
| Aerial telegraph lines | 103,786 89 |
| Battery | 5,392 30 |
| Wagons, harness and bicycles..... | 2,980 00 |
| Additional story to 6345 Wentworth avenue..... | 5,934 00 |
| Additional building at Halsted street (barn and storeroom)..... | 843 86 |
| | <hr/> |
| | \$643,392 47 |

RECAPITULATION.

| | |
|--|--------------|
| Instruments, tools, battery, wagons, harness and bicycles | \$404,949 20 |
| Underground telegraph system..... | 127,878 52 |
| Aerial telegraph system..... | 103,786 89 |
| Portion of cost of additional buildings..... | 6,777 86 |
| | <hr/> |
| | \$642,392 47 |

TABLE SHOWING NUMBER OF ALARMS FOR EACH MONTH AND DAY OF THE WEEK DURING THE YEAR.

| 1896. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | TOTAL. |
|----------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| Sunday..... | 61 | 56 | 66 | 72 | 81 | 59 | 70 | 69 | 46 | 58 | 62 | 48 | 748 |
| Monday..... | 59 | 54 | 76 | 54 | 63 | 74 | 71 | 74 | 54 | 57 | 80 | 55 | 771 |
| Tuesday..... | 82 | 62 | 86 | 65 | 68 | 75 | 70 | 62 | 53 | 67 | 53 | 70 | 813 |
| Wednesday..... | 77 | 72 | 51 | 78 | 67 | 35 | 92 | 68 | 70 | 61 | 48 | 61 | 780 |
| Thursday..... | 82 | 64 | 64 | 78 | 52 | 49 | 79 | 66 | 58 | 62 | 53 | 70 | 777 |
| Friday..... | 81 | 53 | 64 | 60 | 102 | 66 | 95 | 51 | 46 | 84 | 56 | 64 | 822 |
| Saturday..... | 92 | 63 | 62 | 74 | 85 | 53 | 143 | 85 | 37 | 75 | 72 | 73 | 914 |
| TOTAL.... | 534 | 424 | 469 | 481 | 518 | 411 | 620 | 475 | 364 | 464 | 424 | 441 | 5625 |

TABLE SHOWING CLASSIFICATION OF ALARMS FOR EACH MONTH DURING THE YEAR.

| MONTH. | Boxes. | Second Alarms. | Third Alarms. | Combined Second and Third Alarms. | Special Calls. | Still Alarms. | TOTAL. |
|---------------|--------|----------------|---------------|-----------------------------------|----------------|---------------|--------|
| January..... | 290 | 8 | 5 | 5 | 7 | 219 | 534 |
| February..... | 231 | 3 | 1 | 4 | 1 | 184 | 424 |
| March..... | 256 | 11 | 4 | 4 | 5 | 189 | 469 |
| April..... | 254 | 6 | 2 | 2 | 2 | 215 | 481 |
| May..... | 297 | 6 | 0 | 3 | 0 | 212 | 518 |
| June..... | 210 | 6 | 2 | 0 | 0 | 193 | 411 |
| July..... | 354 | 7 | 0 | 2 | 2 | 255 | 620 |
| August..... | 272 | 6 | 0 | 1 | 0 | 196 | 475 |
| September.... | 209 | 3 | 0 | 0 | 0 | 152 | 364 |
| October..... | 248 | 6 | 2 | 2 | 2 | 204 | 464 |
| November..... | 240 | 5 | 2 | 1 | 0 | 176 | 424 |
| December..... | 249 | 6 | 0 | 0 | 0 | 186 | 441 |
| TOTAL..... | 3110 | 73 | 18 | 24 | 19 | 2381 | 5625 |

FIRE DEPARTMENT.

TABLE SHOWING NUMBER OF ALARMS FOR EACH HOUR OF THE DAY DURING THE YEAR.

| 1896. | A. M. | | | | | | | | | | | | P. M. | | | | | | | | | | | | GRAND TOTAL. | |
|----------------|-------|-----|-----|-----|----|----|-----|-----|-----|-----|-----|-----|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----------------|---------|
| | Total | | | | | | | | | | | | Total | | | | | | | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | | |
| January..... | 22 | 17 | 13 | 8 | 7 | 11 | 15 | 10 | 22 | 23 | 18 | 22 | 188 | 21 | 27 | 24 | 27 | 50 | 40 | 29 | 34 | 33 | 18 | 20 | 28 | 346 534 |
| February..... | 18 | 10 | 9 | 6 | 11 | 5 | 11 | 12 | 18 | 13 | 18 | 10 | 141 | 20 | 23 | 16 | 23 | 31 | 40 | 25 | 24 | 30 | 21 | 17 | 13 | 283 424 |
| March..... | 22 | 17 | 14 | 13 | 8 | 9 | 17 | 13 | 18 | 14 | 16 | 27 | 188 | 23 | 18 | 21 | 21 | 28 | 39 | 33 | 39 | 13 | 17 | 20 | 9 | 281 469 |
| April..... | 14 | 14 | 11 | 11 | 14 | 4 | 9 | 17 | 14 | 19 | 25 | 13 | 165 | 31 | 28 | 27 | 27 | 20 | 24 | 37 | 35 | 21 | 14 | 25 | 27 | 316 481 |
| May..... | 15 | 27 | 7 | 11 | 7 | 7 | 7 | 12 | 20 | 19 | 30 | 28 | 190 | 33 | 33 | 33 | 44 | 27 | 18 | 38 | 23 | 25 | 15 | 24 | 20 | 338 518 |
| June..... | 6 | 17 | 14 | 6 | 1 | 6 | 12 | 16 | 18 | 11 | 19 | 9 | 135 | 14 | 24 | 31 | 22 | 22 | 32 | 23 | 32 | 27 | 17 | 17 | 15 | 276 411 |
| July..... | 23 | 11 | 12 | 6 | 7 | 5 | 21 | 20 | 21 | 20 | 25 | 29 | 200 | 35 | 31 | 31 | 36 | 42 | 34 | 39 | 53 | 39 | 25 | 36 | 29 | 430 620 |
| August..... | 15 | 21 | 31 | 12 | 9 | 6 | 9 | 8 | 13 | 30 | 23 | 17 | 194 | 26 | 16 | 20 | 22 | 20 | 21 | 43 | 36 | 21 | 20 | 17 | 19 | 281 475 |
| September..... | 19 | 14 | 12 | 6 | 5 | 4 | 9 | 12 | 16 | 17 | 18 | 8 | 140 | 18 | 18 | 8 | 20 | 19 | 29 | 27 | 19 | 20 | 21 | 13 | 12 | 224 364 |
| October..... | 19 | 18 | 15 | 9 | 11 | 1 | 13 | 10 | 16 | 8 | 22 | 39 | 181 | 18 | 16 | 29 | 29 | 39 | 27 | 23 | 31 | 10 | 20 | 16 | 25 | 283 464 |
| November..... | 16 | 16 | 13 | 10 | 7 | 4 | 7 | 12 | 10 | 15 | 24 | 10 | 144 | 16 | 20 | 17 | 33 | 44 | 34 | 22 | 26 | 17 | 13 | 20 | 18 | 280 424 |
| December..... | 6 | 12 | 8 | 16 | 8 | 8 | 11 | 14 | 21 | 22 | 16 | 25 | 167 | 18 | 12 | 25 | 41 | 44 | 19 | 20 | 23 | 22 | 21 | 16 | 13 | 274 441 |
| TOTAL..... | 195 | 194 | 159 | 114 | 95 | 70 | 141 | 156 | 207 | 211 | 254 | 237 | 2033 | 263 | 266 | 287 | 345 | 386 | 347 | 359 | 375 | 278 | 292 | 241 | 243 | 359 565 |

TABLE SHOWING THE NUMBER OF ALARMS FROM EACH BOX DURING THE YEAR.

| Box. | Alarm. | Box. | Alarm. | Box. | Alarm. | Box. | Alarm. | Box. | Alarm. | Box. | Alarm. |
|-----------------|--------|------------------|--------|------|--------|------------------|--------|------------------|--------|------------------|--------|
| 12 | 1 | 82 | 5 | 161 | ... | 244 | 6 | 331 | 12 | 394 | 2 |
| 12 ^D | ... | 83 | 4 | 162 | 5 | 245 | ... | 332 | 13 | 395 | 3 |
| 13 | ... | 84 | ... | 165 | ... | 247 | ... | 333 | 21 | 396 | ... |
| 14 | 9 | 85 | 2 | 166 | ... | 248 | ... | 334 | 11 | 397 | 1 |
| 15 | 5 | 86 | 8 | 167 | 1 | 252 | 1 | 335 | 11 | 398 | 2 |
| 16 | 5 | 87 | ... | 168 | 12 | 253 | ... | 336 | 3 | 399 | 1 |
| 17 | ... | 88 | ... | 169 | 1 | 254 | 5 | 337 | 15 | 411 | 5 |
| 18 | 7 | 89 | 3 | 171 | 2 | 261 | 4 | 338 | 3 | 412 | 4 |
| 19 | 3 | 91 | 5 | 172 | 7 | 262 | 3 | 339 | 6 | 413 | 8 |
| 21 | 1 | 92 | ... | 173 | 6 | 263 | ... | 341 | 2 | 414 | 7 |
| 22 | 4 | 93 | ... | 174 | 6 | 264 | ... | 342 | 9 | 415 | 4 |
| 23 | 4 | 94 | 1 | 175 | 3 | 265 | ... | 343 ^D | 6 | 416 | 7 |
| 24 | 3 | 95 | 1 | 176 | 6 | 266 | 9 | 343 | ... | 417 | 4 |
| 25 | 8 | 96 | 6 | 177 | 3 | 267 | ... | 344 ^D | 5 | 418 | 9 |
| 26 | 4 | 97 | 4 | 178 | 14 | 268 | 1 | 344 | 1 | 419 | 3 |
| 27 | 3 | 98 | 1 | 179 | 3 | 269 | 5 | 345 | 1 | 421 | 2 |
| 28 | 6 | 99 | ... | 181 | 3 | 271 ^D | 4 | 346 | 17 | 422 | 5 |
| 29 | 4 | 112 | ... | 182 | 2 | 271 | ... | 347 | 8 | 423 | 4 |
| 31 | 1 | 113 | 3 | 183 | 3 | 272 | 2 | 348 | 4 | 424 | 6 |
| 32 | 4 | 114 | 6 | 184 | 2 | 273 | 4 | 349 | 13 | 425 | 5 |
| 33 | 2 | 115 | 2 | 185 | 3 | 274 | 29 | 351 | 4 | 426 | 7 |
| 34 | ... | 116 | 1 | 186 | ... | 275 | 3 | 352 | 10 | 427 | ... |
| 35 | 9 | 117 | ... | 187 | ... | 276 | 6 | 353 | 2 | 428 | 3 |
| 36 | 12 | 118 | 6 | 188 | 8 | 277 ^D | ... | 354 | 1 | 429 | 7 |
| 37 | 5 | 119 | 1 | 189 | 1 | 277 | ... | 355 | 12 | 431 | 14 |
| 38 | 1 | 121 | 11 | 191 | ... | 278 | 3 | 356 | 11 | 432 | 6 |
| 39 ^D | 8 | 122 | 7 | 192 | ... | 279 | 4 | 357 | 4 | 433 | 9 |
| 39 | ... | 123 | 2 | 193 | ... | 281 | 4 | 358 | 8 | 434 ^D | 4 |
| 41 | 1 | 124 | 1 | 194 | ... | 282 | ... | 359 | 2 | 434 | ... |
| 42 | 5 | 125 | 3 | 195 | 2 | 283 | 4 | 361 | 3 | 435 | 7 |
| 43 | 4 | 126 | 8 | 196 | 2 | 284 | 1 | 362 | 6 | 436 | ... |
| 44 | 1 | 127 | 9 | 197 | 2 | 285 | 9 | 363 | 1 | 437 ^D | 3 |
| 45 | 1 | 128 | 2 | 198 | 2 | 286 | 9 | 364 | ... | 437 | ... |
| 46 | 7 | 129 | 4 | 199 | 1 | 287 | 3 | 364 ^D | ... | 438 | ... |
| 47 | 5 | 131 | 4 | 211 | 1 | 288 ^D | 1 | 364 ^T | ... | 439 | 2 |
| 48 | ... | 132 | 1 | 212 | ... | 288 | ... | 365 | ... | 441 | ... |
| 49 | ... | 133 | 1 | 213 | 1 | 289 | 3 | 366 | ... | 442 | ... |
| 51 | 1 | 134 | 3 | 214 | ... | 290 | 15 | 367 | 3 | 443 | ... |
| 52 | ... | 135 | ... | 215 | 2 | 291 | 3 | 368 | 6 | 444 | ... |
| 53 | 6 | 136 ^D | 1 | 216 | 1 | 292 | 4 | 369 | 15 | 445 | 7 |
| 54 | 6 | 136 | ... | 217 | 2 | 293 | 6 | 371 | 7 | 446 | 9 |
| 55 | 11 | 137 | 1 | 218 | 11 | 294 | 8 | 372 | 11 | 447 | 1 |
| 56 | 22 | 138 | 1 | 219 | 7 | 295 | 8 | 373 | 1 | 448 | 1 |
| 57 | 6 | 139 | 2 | 221 | 2 | 296 | 16 | 374 | 14 | 449 | 1 |
| 58 | 2 | 141 | 2 | 222 | 8 | 297 | 9 | 375 | 3 | 451 | 4 |
| 59 | 2 | 142 | 4 | 223 | ... | 298 | 9 | 376 | 7 | 452 | 3 |
| 61 | 2 | 143 | 12 | 224 | 1 | 299 | 8 | 377 | 3 | 453 | 13 |
| 62 | 2 | 144 | 3 | 225 | 1 | 311 | 10 | 378 | 10 | 454 | 2 |
| 63 | 3 | 145 | 1 | 226 | 17 | 312 | 9 | 379 | 15 | 455 | 2 |
| 64 ^D | 20 | 146 ^D | 1 | 227 | 11 | 313 | 1 | 381 | 11 | 456 | 5 |
| 64 | ... | 146 | ... | 228 | 2 | 314 | 4 | 382 ^D | 7 | 457 | 5 |
| 65 | 8 | 147 ^D | 3 | 229 | ... | 315 | ... | 382 | ... | 458 | 8 |
| 66 | 2 | 147 | ... | 231 | 2 | 316 | 6 | 383 ^D | 2 | 459 | 2 |
| 67 | 10 | 148 | 4 | 232 | 3 | 317 | 1 | 383 | ... | 461 | 3 |
| 68 | 15 | 149 | 4 | 233 | 10 | 318 | 3 | 384 | ... | 462 | 7 |
| 69 | 3 | 151 | 16 | 234 | 7 | 319 | ... | 385 | 5 | 463 | 6 |
| 71 | 4 | 152 | 9 | 235 | 3 | 322 | ... | 386 | 8 | 464 | 9 |
| 72 | 2 | 153 | ... | 236 | 2 | 323 | 4 | 387 | 5 | 465 | 2 |
| 73 | 3 | 154 | 6 | 237 | 4 | 324 | 4 | 388 | 7 | 468 | 6 |
| 74 | 7 | 155 | 5 | 238 | 4 | 325 | 33 | 389 | 2 | 471 | 2 |
| 75 | 8 | 156 | 1 | 239 | 3 | 326 | 23 | 391 | 1 | 472 | 8 |
| 76 | 6 | 157 | 3 | 241 | 4 | 327 | 26 | 392 ^D | 5 | 473 | 5 |
| 77 | 1 | 158 | 1 | 242 | 4 | 328 | 5 | 392 | ... | 474 | 6 |
| 81 | 2 | 159 | 2 | 243 | ... | 329 | 5 | 893 | ... | 475 | 7 |

TABLE SHOWING THE NUMBER OF ALARMS FROM EACH BOX DURING THE YEAR—CONTINUED.

| Box. | Alarm. | Box. | Alarm. | Box. | Alarm. | Box. | Alarm. | Box. | Alarm. | Box. | Alarm. |
|-----------|--------|-----------|--------|-----------|--------|-----------|--------|-----------|--------|------------|--------|
| 476 | 10 | 552 | 4 | 641 | .... | 842 | 5 | 918 | .... | 1115 | 13 |
| 477 | 3 | 553 | 1 | 643 | .... | 843 | 1 | 919 | 3 | 1116 | 5 |
| 478 | .... | 554 | 1 | 644 | 3 | 844 | 7 | 921 | 2 | 1117 | 7 |
| 481 | 3 | 555 | 1 | 645 | 2 | 845 | 6 | 922 | 3 | 1118 | 9 |
| 482 | .... | 556 | 8 | 646 | 1 | 846 | 12 | 923 | 1 | 1119 | 4 |
| 483 | 4 | 557 | 4 | 647 | .... | 846 D | .... | 924 | 3 | 1121 | 2 |
| 484 | 4 | 558 | 7 | 648 | 5 | 847 | 7 | 925 | 1 | 1122 | .... |
| 485 | 7 | 559 | 1 | 649 | 5 | 848 | 2 | 926 | 1 | 1123 | 5 |
| 486 | 9 | 561 | 3 | 651 | 3 | 849 | 4 | 927 | 1 | 1124 | 13 |
| 487 | 4 | 562 | .... | 652 | 2 | 851 | 5 | 928 | 2 | 1125 | 7 |
| 488 | .... | 563 | 4 | 653 | 1 | 852 | .... | 929 | 2 | 1126 | 4 |
| 489 | 5 | 564 | 7 | 656 | .... | 853 | 2 | 931 | 5 | 1127 | 8 |
| 491 | 4 | 565 | 2 | 657 | 1 | 854 | .... | 932 | 1 | 1128 | 2 |
| { 492 D } | .... | 566 | 2 | 658 | 1 | 855 | 1 | 933 | 1 | 1129 | 1 |
| 492 | .... | 568 | 6 | 661 | 4 | 856 | 8 | 934 | .... | 1131 | 4 |
| 493 | 1 | 569 | 2 | 662 | 3 | 857 | 6 | 935 | 3 | 1132 | 3 |
| { 494 D } | .... | 571 | 1 | 663 | 5 | 858 | .... | 936 | 3 | 1133 | .... |
| 494 | .... | 574 D } | .... | 665 | .... | 859 | 7 | 937 | .... | { 1134 D } | 2 |
| 495 | 1 | 574 | .... | 666 | 1 | { 861 D } | 8 | 938 | .... | 1134 D } | .... |
| 496 | 9 | 575 | 1 | 669 | 1 | 861 | .... | 939 | .... | 1135 | 3 |
| 497 | 9 | 576 | 4 | 674 | .... | 862 | 3 | 941 | 4 | 1136 | 10 |
| 498 | .... | 577 | 3 | 675 | 3 | 863 | 8 | 942 | 3 | 1137 | 1 |
| 499 | 7 | 578 | 2 | 676 | 1 | 864 | 7 | 943 | .... | 1138 | 5 |
| 511 | 1 | 579 | 2 | 677 | 6 | 865 | 4 | 944 | .... | 1139 | 4 |
| 512 | 3 | 581 | 5 | 678 | 4 | 866 | 6 | 945 | 4 | 1141 | 1 |
| 513 | 1 | 582 | 2 | 679 | .... | 867 | 4 | 946 | 1 | 1142 | .... |
| { 514 D } | .... | 583 | 5 | 681 | .... | 868 | 3 | 947 | 3 | 1143 | 1 |
| 514 | .... | 584 | 4 | 683 | .... | 869 | 4 | 948 | .... | 1144 | .... |
| { 514 T } | .... | 585 | 4 | 686 | 2 | 871 | 1 | 949 | .... | 1145 | .... |
| 515 | 1 | { 586 D } | 5 | 721 | 2 | { 872 D } | 11 | 951 | .... | 1146 | .... |
| 516 | 3 | 586 | .... | 724 | 2 | 872 | .... | 952 | 3 | 1147 | .... |
| 517 | .... | 587 | 3 | 732 | .... | 873 | 4 | 953 | 1 | 1148 | 2 |
| { 518 D } | 1 | 588 | 3 | 734 | 2 | 874 | .... | 954 | .... | 1149 | 4 |
| { 518 D } | .... | 589 | 2 | 735 | 8 | 875 | 4 | 955 | .... | 1151 | 2 |
| { 519 D } | 2 | 591 | .... | { 736 D } | .... | { 875 D } | .... | 956 | 1 | 1152 | .... |
| 519 | .... | 592 | 3 | 736 | .... | 875 T } | .... | 957 | 1 | 1153 | 5 |
| 521 | 4 | 593 | 1 | 812 | 1 | 876 | 3 | 958 | 3 | 1154 | 1 |
| 522 | 10 | 594 | 5 | 813 | .... | 877 | 1 | 961 | 1 | 1155 | .... |
| 523 | .... | 595 | 3 | 814 | 3 | 878 | 1 | 962 | 1 | 1156 | .... |
| 524 | 1 | 596 | 10 | 815 | 1 | 879 | 2 | 963 | 2 | 1157 | .... |
| 525 | 6 | 597 | 2 | 816 | 4 | 881 | 12 | 964 | .... | 1158 | 5 |
| 526 | 1 | 598 | .... | 817 | 4 | 882 | 5 | 965 | .... | 1161 | .... |
| 527 | 7 | 599 | 2 | 818 | 3 | 883 | 2 | 966 | 1 | 1162 | .... |
| 528 | 5 | 611 | 1 | 819 | .... | 884 | 2 | 967 | 8 | 1163 | 1 |
| 529 | 2 | 612 | 8 | 821 | 2 | 885 | 6 | { 969 D } | 9 | 1166 | 3 |
| 531 | 7 | 613 | 1 | 822 | .... | 886 | .... | 969 | .... | 1167 | 2 |
| 532 | 13 | 614 | 2 | 823 | 2 | 887 | 2 | 971 | .... | 1168 | .... |
| 533 | 2 | 615 | 1 | 824 | 4 | 888 | 1 | 1012 | .... | 1169 | .... |
| 534 | 3 | 616 | .... | 825 | 12 | 889 | 7 | 1013 | .... | 1171 | .... |
| 535 | 1 | 617 | 2 | 826 | 8 | 891 | 4 | 1014 | .... | 1173 | 1 |
| 536 | 4 | 618 | 2 | 827 | 11 | 892 | .... | 1015 | .... | 1174 | 10 |
| 537 | 4 | 619 | 1 | 828 | 2 | 893 | 5 | 1017 | .... | 1175 | 3 |
| 538 | 1 | 621 | 1 | { 829 D } | 4 | 894 | 9 | 1019 | 3 | 1176 | 1 |
| 539 | 9 | 622 | .... | 829 | .... | 895 | 2 | 1021 | .... | 1178 | 1 |
| 541 | 1 | 623 | .... | 831 | .... | 897 | 1 | 1024 | 1 | 1179 | .... |
| 542 | 2 | 624 | 2 | 832 | 6 | 898 | 7 | 1031 | 1 | 1181 | 1 |
| 543 | 1 | 625 | 3 | 833 | .... | 899 | 1 | 1042 | 1 | 1182 | 8 |
| 544 | 1 | 626 | 4 | 834 | 2 | 911 | .... | 1043 | .... | 1183 | 4 |
| 545 | 4 | 627 | 2 | 835 | 2 | 912 | .... | 1045 | 3 | 1184 | .... |
| 546 | 3 | 629 | 1 | 836 | 5 | 913 | 8 | 1046 | 2 | 1185 | .... |
| 547 | .... | { 631 D } | 2 | 837 | 9 | 914 | .... | 1047 | 1 | 1186 | 2 |
| 548 | 3 | 631 | .... | 838 | 5 | 915 | 1 | 1061 | 1 | 1187 | 1 |
| 549 | .... | 632 | .... | 839 | 4 | 916 | 2 | 1112 | .... | 1188 | .... |
| 551 | 1 | { 632 D } | .... | 841 | 7 | 917 | .... | 1114 | 2 | 1189 | .... |
| | | 632 T } | .... |  |  |  |  |  |  |  |  |

TABLE SHOWING THE NUMBER OF ALARMS FROM EACH
BOX DURING THE YEAR—CONTINUED.

| Box. | Alarm. | Box. | Alarm. | Box. | Alarm. | Box. | Alarm. | Box. | Alarm. | Box. | Alarm. |
|------------|--------|------------|--------|------------|--------|------------|--------|------|--------|------|--------|
| 1191 | ... | 1417 | 1 | 2167 | 1 | 2425 | ... | 3386 | ... | 5176 | 2 |
| 1194 | 5 | 1418 | 1 | 2168 | 5 | 2426 | 2 | 3388 | ... | 5178 | ... |
| { 1195 D } | 1 | 1422 | 13 | 2169 | 5 | 2427 | ... | 4112 | ... | 5182 | ... |
| | ... | 1457 | 6 | 2171 | 5 | 2428 | 3 | 4115 | ... | 5185 | 2 |
| 1196 | ... | 1458 | ... | 2172 | 5 | 2429 | 1 | 4117 | 2 | 5188 | ... |
| 1199 | ... | 1462 | 1 | 2173 | 4 | 2469 | 5 | 4118 | ... | 5191 | 1 |
| 1212 | 1 | 1463 | 1 | 2174 | 5 | 2472 | 7 | 4121 | 3 | 5192 | 1 |
| 1213 | ... | 1464 | 5 | 2175 | 8 | 2473 | 5 | 4122 | ... | 5193 | 1 |
| 1214 | 1 | 1476 | 1 | { 2176 D } | 2 | 2474 | 9 | 4123 | ... | 5196 | ... |
| 1215 | ... | 1497 | 3 | | ... | 2475 | 3 | 4125 | 2 | 5197 | 2 |
| 1216 | 1 | 1498 | 4 | 2178 | ... | 2476 | 2 | 4127 | 1 | 5211 | 3 |
| 1217 | ... | 1499 | 2 | 2181 | ... | { 2477 D } | 11 | 4128 | ... | 5227 | 2 |
| 1218 | 1 | 1511 | ... | 2182 | 1 | | ... | 4131 | 4 | 5237 | 2 |
| 1219 | ... | 1512 | ... | 2183 | 1 | 2478 | 2 | 4132 | 1 | 5238 | 5 |
| { 1221 D } | ... | 1513 | ... | 2185 | 3 | 2479 | 1 | 4133 | ... | 5243 | 1 |
| | ... | 1514 | 5 | 2186 | 11 | 2481 | 1 | 4134 | ... | 5244 | ... |
| 1222 | 3 | 1515 | 4 | 2231 | 12 | 2482 | 1 | 4141 | ... | 5252 | 1 |
| 1223 | 5 | 1518 | ... | 2232 | 3 | 2485 | 1 | 4142 | 1 | 5254 | 3 |
| 1224 | ... | 1522 | 2 | 2233 | ... | 2535 | 4 | 4161 | ... | 5284 | 3 |
| 1227 | ... | 1536 | 5 | 2234 | 5 | 2537 | 3 | 4162 | 1 | 5285 | 8 |
| 1228 | 2 | 1548 | ... | 2235 | ... | 2538 | 1 | 4163 | 2 | 5293 | ... |
| 1229 | 3 | 1549 | ... | 2236 | 5 | 2539 | ... | 4164 | 1 | 5321 | ... |
| 1231 | 13 | 1552 | ... | 2238 | ... | 2541 | ... | 4165 | ... | 5327 | ... |
| 1232 | 3 | 1557 | 2 | 2241 | 1 | 2542 | 3 | 4167 | ... | 5328 | ... |
| 1233 | 2 | 1571 | 1 | 2242 | 5 | 2543 | 1 | 4171 | ... | 5343 | ... |
| 1234 | 1 | 1595 | 2 | 2243 | 7 | 2544 | 2 | 4184 | ... | 5378 | ... |
| 1235 | ... | 1611 | ... | 2244 | 5 | 2545 | 5 | 4186 | ... | 5476 | ... |
| 1236 | ... | 1612 | ... | { 2245 D } | 6 | 2546 | 2 | 4211 | ... | 6113 | 4 |
| 1237 | 2 | 1613 | 2 | | ... | 2547 | 1 | 4215 | ... | 6114 | ... |
| 1238 | 1 | 1647 | ... | 2248 | 1 | 2549 | 7 | 4217 | ... | 6118 | 2 |
| 1239 | 1 | 1649 | 5 | 2252 | 6 | 2553 | 1 | 4218 | 2 | 6122 | 2 |
| { 1243 D } | 1 | 1657 | ... | 2253 | 8 | 2558 | 5 | 4221 | 1 | 6123 | 2 |
| | ... | 1662 | 3 | 2278 | ... | 2591 | 4 | 4223 | 2 | 6124 | 1 |
| 1244 | 5 | 1668 | ... | 2285 | 5 | 2592 | 1 | 4224 | 1 | 6125 | ... |
| 1247 | 1 | 1674 | ... | 2287 | 6 | 2593 | ... | 4225 | 3 | 6142 | 4 |
| 1248 | 2 | 1688 | 1 | 2289 | 7 | 2594 | ... | 4227 | 1 | 6143 | 5 |
| 1253 | ... | 1699 | 1 | 2292 | 4 | 2595 | ... | 4233 | 3 | 6145 | 3 |
| 1263 | 1 | 1716 | ... | 2293 | 4 | 2597 | 1 | 4238 | 1 | 6151 | ... |
| 1268 | 5 | 1721 | 2 | 2294 | 7 | 2598 | 4 | 4265 | 4 | 6173 | ... |
| 1275 | ... | 1724 | 1 | { 2297 D } | 9 | 2655 | 1 | 4267 | 2 | 6235 | ... |
| 1276 | 2 | 1757 | ... | | ... | 2656 | ... | 4272 | 4 | 6237 | 3 |
| 1278 | 3 | 1759 | 3 | 2298 | ... | { 2662 D } | 1 | 5111 | 1 | 6251 | ... |
| 1279 | ... | { 2111 D } | 17 | 2299 | ... | | ... | 5112 | 1 | 6254 | ... |
| 1281 | 5 | | ... | 2312 | 5 | 2718 | ... | 5113 | ... | 6265 | 1 |
| 1282 | 4 | 2112 | 3 | 2313 | 2 | 2719 | ... | 5118 | 5 | 6277 | 1 |
| 1287 | 3 | { 2113 D } | 7 | 2316 | ... | 2724 | 1 | 5121 | 3 | 6281 | ... |
| 1292 | 1 | | ... | 2353 | 1 | 2771 | ... | 5122 | 3 | 6314 | ... |
| 1295 | 1 | 2114 | 6 | 2355 | 1 | 2772 | 1 | 5123 | 1 | 6334 | 2 |
| 1297 | 8 | 2115 | ... | 2356 | ... | 2832 | ... | 5125 | 2 | 6436 | ... |
| 1298 | 3 | 2116 | 3 | 2357 | 3 | 2834 | 4 | 5128 | 4 | 8112 | 1 |
| 1318 | 1 | 2118 | ... | 2359 | 6 | 3123 | ... | 5133 | 2 | 8113 | ... |
| 1319 | ... | 2119 | 6 | 2361 | 3 | 3127 | 1 | 5138 | ... | 8114 | 4 |
| 1321 | 3 | 2121 | 2 | 2362 | 2 | 3153 | 2 | 5141 | ... | 8115 | 8 |
| 1322 | 1 | 2123 | 5 | 2364 | 2 | 3157 | 1 | 5144 | ... | 8116 | 1 |
| 1326 | 3 | 2126 | 2 | 2365 | 1 | 3163 | 5 | 5146 | 2 | 8117 | 2 |
| 1329 | 5 | 2128 | ... | 2366 | ... | 3173 | 1 | 5148 | 2 | 8118 | ... |
| 1333 | ... | 2156 | 2 | 2413 | ... | 3193 | 4 | 5152 | ... | 8121 | 1 |
| 1341 | ... | 2158 | ... | 2416 | 1 | 3225 | 1 | 5153 | ... | 8122 | ... |
| 1343 | 3 | 2159 | 2 | 2418 | 5 | 3235 | ... | 5155 | 1 | 8123 | ... |
| 1344 | 3 | 2161 | 3 | 2419 | 2 | 3269 | ... | 5157 | 1 | 8124 | 1 |
| 1356 | 3 | 2162 | 3 | 2421 | 5 | 3313 | 1 | 5161 | 2 | 8125 | 2 |
| 1358 | 3 | 2163 | ... | 2422 | 1 | 3317 | ... | 5165 | ... | 8126 | 1 |
| 1365 | 5 | 2164 | 3 | 2423 | 2 | 3382 | 1 | 5166 | 1 | 8127 | 3 |
| 1399 | ... | 2165 | 2 | 2424 | 4 | 3384 | ... | 5168 | 1 | 8128 | 1 |

TABLE SHOWING THE NUMBER OF ALARMS FROM EACH BOX DURING THE YEAR—CONTINUED.

| Box. | Alarm. | Box. | Alarm. | Box. | Alarm. | Box. | Alarm. | Box. | Alarm. | Box. | Alarm. |
|------|--------|-------------------|--------|------|--------|------|--------|------|--------|------|--------|
| 8131 | 1 | 8154 | 1 | 8175 | 1 | 8214 | 2 | 8246 | ... | 8328 | ... |
| 8133 | ... | 8155 | 1 | 8176 | 1 | 8215 | 3 | 8248 | ... | 8372 | 3 |
| 8134 | 1 | 8156 | 1 | 8178 | ... | 8216 | 4 | 8254 | ... | 8378 | 2 |
| 8137 | ... | 8157 | 1 | 8181 | ... | 8218 | 2 | 8256 | ... | 8381 | 1 |
| 8138 | 3 | 8158 | 1 | 8182 | ... | 8223 | ... | 8257 | ... | 8382 | ... |
| 8141 | 2 | 8158 ^D | ... | 8183 | ... | 8225 | 2 | 8261 | ... | 8444 | ... |
| 8142 | ... | 8161 | 3 | 8188 | ... | 8231 | ... | 8271 | ... | 8447 | ... |
| 8143 | ... | 8162 | 2 | 8194 | 3 | 8232 | ... | 8275 | ... | 8454 | ... |
| 8144 | ... | 8163 | 4 | 8195 | 1 | 8234 | ... | 8277 | ... | 8455 | ... |
| 8147 | ... | 8164 | ... | 8196 | ... | 8235 | 2 | 8278 | ... | 8531 | ... |
| 8148 | 3 | 8166 | ... | 8197 | ... | 8236 | ... | 8281 | ... | 8592 | ... |
| 8151 | 2 | 8168 | 3 | 8198 | ... | 8238 | 2 | 8284 | 1 | 8672 | ... |
| 8152 | 4 | 8171 | 2 | 8211 | ... | 8244 | ... | 8323 | ... | ... | ... |
| 8153 | 3 | 8172 | ... | 8213 | ... | 8245 | ... | 8325 | ... | ... | ... |

Respectfully submitted,

J. P. BARRETT,
Superintendent of City Telegraph.

EXHIBIT "F."

REPORT OF THE FIRE INSPECTOR.

CHICAGO, ILL., December 31, 1896

D. J. SWENIE, ESQ.:

Fire Marshal and Chief of Brigade.

DEAR SIR:—I have the honor to submit herewith my sixth annual report and the eleventh of this branch of the service.

A summary of the work performed the past year is shown in the following table:

| MONTHS. | Number of Fires Investi- gated. | Number of Persons Arrested. | Number of Persons Indicted. | Number of Persons Convicted | REMARKS. |
|----------------|--|--------------------------------------|--------------------------------------|--------------------------------------|--------------|
| January | 17 | 1 | 1 | ..... | ..... |
| February | 19 | 2 | 2 | ..... | ..... |
| March..... | 21 | 3 | 2 | ..... | ..... |
| April..... | 16 | 4 | 1 | ..... | ..... |
| May..... | 18 | ..... | 1 | ..... | ..... |
| June..... | 20 | ..... | ..... | ..... | ..... |
| July..... | 15 | 1 | 1 | 1 | ..... |
| August..... | 20 | 1 | 1 | ..... | ..... |
| September..... | 23 | 2 | 2 | 1 | ..... |
| October..... | 16 | ..... | ..... | ..... | ..... |
| November..... | 27 | ..... | ..... | ..... | Two awaiting |
| December..... | 25 | 1 | 1 | 1 | trial. |
| Totals | 237 | 15 | 12 | 3 | ..... |

In investigating eighteen of the before-mentioned fires, I examined twenty-one persons under oath in reference to the origin of the fires. In several cases the examination disclosed the true cause thereof.

During the session of the next Legislature I shall renew the effort made at the last one, to have a bill passed empowering this office to compel the attendance of persons to testify under oath in reference to the origin of fires, and making false swearing in such cases perjury, and punishable as such.

Respectfully submitted,

M. W. CONWAY,

Fire Inspector.

| RECAPITULATION OF THE APPARATUS, ETC., OF THE DEPARTMENT, DECEMBER 31, 1896. | | In Service. | In Reserve. | Total. |
|---|-----|-------------|-------------|---------|
| Fire-Boats.... | 4 | ... | | 4 |
| Water Towers.... | 1 | 1 | | 2 |
| Steam Fire Engines, special 1st class..... | 1 | ... | | 1 |
| Steam Fire Engines, extra 1st class..... | 4 | ... | | 4 |
| Steam Fire Engines, 1st class..... | 12 | 4 | | 16 |
| Steam Fire Engines, 2d class..... | 47 | 2 | | 49 |
| Steam Fire Engines, 3d class..... | 1 | 1 | | 2 |
| Steam Fire Engines, 3d class, combination..... | 14 | ... | | 14 |
| Total Steam Fire Engines..... | 79 | 7 | | 86 |
| Fire Engines, manual .. | 4 | ... | | 4 |
| Chemical Engines, two-horse..... | 4 | ... | | 4 |
| Chemical Engines, one-horse..... | 10 | 1 | | 11 |
| Chemical Engines, manual..... | 3 | ... | | 3 |
| Chemical Engines and Hose Carriages combined..... | 3 | 1 | | 4 |
| Chemical Engines, Trucks and Hose Carriages combined..... | 5 | ... | | 5 |
| Total Chemical Engines..... | 25 | 2 | | 27 |
| Hose Wagons, two-horse..... | 6 | ... | | 6 |
| Hose Wagons, one-horse..... | 35 | 1 | | 36 |
| Hose Carriages, two-horse..... | 25 | 10 | | 35 |
| Hose Carts, one-horse..... | 1 | ... | | 1 |
| Hose Carts, manual..... | 6 | ... | | 6 |
| Hose Carriage and Chemical combined..... | 3 | 1 | | 4 |
| Total Hose Wagons, Carriages and Carts..... | 76 | 12 | | 88 |
| Hook and Ladder Trucks, Turn-Table Extension, 1st class..... | 4 | ... | | 4 |
| Hook and Ladder Trucks, Turn-Table Extension, 2d class..... | 6 | ... | | 6 |
| Hook and Ladder Trucks, straight frame, 1st class..... | 9 | 3 | | 12 |
| Hook and Ladder Trucks, straight frame, 2d class..... | 3 | ... | | 3 |
| Hook and Ladder Trucks, straight frame, 3d class..... | 5 | ... | | 5 |
| Hook and Ladder Trucks, manual..... | 3 | ... | | 3 |
| Total Hook and Ladder Trucks..... | 30 | 3 | | 33 |
| Chemical Extinguishers, large..... | 16 | ... | | 16 |
| Chemical Extinguishers, small..... | 53 | ... | | 53 |
| Portable Pumps..... | 68 | ... | | 68 |
| Siamese connections, 2-way..... | 89 | ... | | 89 |
| Siamese connections, 3-way..... | 6 | ... | | 6 |
| Siamese connections, 4-way..... | 12 | ... | | 12 |
| Total Siamese connections..... | 107 | ... | | 107 |
| Horses..... | 477 | ... | | 477 |
| Hose, Rubber, feet..... | | | | 28,702 |
| Hose, Cotton, feet..... | | | | 147,110 |
| Wagons, 2-horse..... | | | | 29 |
| Wagons, 1-horse..... | | | | 21 |

INVENTORY.

REAL ESTATE OCCUPIED BY FIRE DEPARTMENT.

| HOW OCCUPIED. | DESCRIPTION. | SUB-LOT OR LOT. | LOT OR S. BLOCK. | SIZE. | VALUATION. |
|--|--|--------------------------|-----------------------------|--|-----------------------------|
| Engine house No. 1 | School Section Addition. | { N. 25 ft. S. 20 ft. | 23 { } | 45x100 ft. | \$45,000 00 |
| Engine house No. 2 | South Branch Addition. | | 22 { } | 43x114 ft. | 2,000 00 |
| Engine house No. 3 | Ogden's Addition. | W. $\frac{1}{2}$ | 14 { } | 20x90 ft. | 2,000 00 |
| Engine house No. 4 | Elston's Addition, part of Yates' Re- Subdivision. | { } | 3 { } | 25x110 ft. | 1,500 00 |
| Engine house No. 5 | School Section Addition. | | 38 { } | 49.5x150 ft. | 10,000 00 |
| Engine house No. 6 | Brinard & Evans' Addition. | | 11 { } | 23x110 ft. | 2,500 00 |
| Engine house No. 7 | S. E. $\frac{1}{4}$ Sec. 17, T. 39, R. 14. | | 26 { } | 25x120 ft. | 5,000 00 |
| Engine house No. 8 | S. E. $\frac{1}{4}$ Sec. 21, T. 39, R. 14. | E. 25 ft. | 13 { } | 25x130 ft. | 6,000 00 |
| Engine house No. 9 | W. $\frac{1}{2}$ Sec. 27, T. 39, R. 14. | S. $\frac{1}{2}$ | 7 { } | 30x120 ft. | 6,000 00 |
| Engine house No. 10 and Hook and Ladder No. 1 | School Section Addition. | | 1 { } | 50x105 ft. | { Leased of School Fund. |
| Engine house No. 11 | Kinzie's Addition. | E. $\frac{1}{2}$ | 14 { } | 25x100 ft. | |
| Engine house No. 12 | Section 7, T. 39, R. 14. | W. $\frac{1}{2}$ 1 | 8 { } | 30x144 ft. | 6,200 00 |
| Engine house No. 13 | Original Town. | 7 | 4 & 5 { } | { L. 6x30 ft. & 36 $\frac{1}{2}$ x80.42ft. | 6,000 00 |
| Engine house No. 14 | Higgins, Law & Co.'s Addition. | | 5, 6 & 7 { } | 48x30 ft. | { } 24,000 00 |
| Engine house No. 15 | Walsh's Subdivision in S. E. $\frac{1}{4}$ Sec. 20, T. 39, R. 14. | { } | 4 & 5 { } | 23x202 ft. | |
| Engine house No. 16 | C. I. Subdivision, Sec. 33, T. 39, R. 14; Boone, Jones and Keifer's Sub- division of N. $\frac{1}{4}$ of block 1 and lot 49, in S. $\frac{1}{2}$ of block 1, and E. 75 ft. of block 2. | { } | 18 & W. 12 ft. of 17 { } | 12x100 ft. | { } 3,500 00 |
| Engine house No. 17 | Original Town. | 1 | 23 { } | 35x114 ft. | |
| Engine house No. 18 and Hook and Ladder No. 5 | Waller's Subdivision of N. W. $\frac{1}{4}$ N. E. $\frac{1}{4}$ Sec. 20, T. 39, R. 14. | { } | 6 & 7 { } | 30x140 ft. | 10,000 00 |
| | | | 14 & 15 { } | 50x120 ft. | 8,000 00 |

FIRE MARSHAL'S REPORT.

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| Engine house No. 19. | University Subdivision of that part W. of Cottage Grove ave., of S. E. ‡ N. E. ‡ Sec. 34, T. 39, R. 14. | 9 | 6 | 50x164.5 ft. | 1,000 00 |
|---|--|---------|---------------------------------|------------------------------|----------|
| Engine house No. 20. | Sheffield's Addition. | 3 | 18. | 25x115 ft. | 1,000 00 |
| Engine house No. 21. | School Section Addition. | 20 & 23 | 132 | 24x100 ft. | 5,000 00 |
| Engine house No. 22. | C. T. Subdivision Sec. 33, T. 40, R. 14 | 2 | 12 | 48x124 ft. | 2,000 00 |
| Engine house No. 23. | Section 19, T. 39, R. 14. | 47 | 63 | 25x125 ft. | 1,275 00 |
| Engine house No. 24. | Boone's Addition to Chicago. | 21 & 22 | ..... | 48.5x127 ft. | 3,750 00 |
| Engine house No. 25. | C. T. Subdivision W. ‡ Sec. 21, T. 39, R. 14. | 2 | 38 | 25x120 ft. | 3,750 00 |
| Engine house No. 26 and Hook and Ladder No. 7. | Section 7, T. 39, R. 14. | 6 | 30 | 63x90 ft. | 3,700 00 |
| Engine house No. 27. | Bronson's Addition. | 1 & 2 | ..... | 44x100 ft. | 5,500 00 |
| Engine house No. 28 and Hook and Ladder No. 8. | S. frac. Sec. 29, T. 39, R. 14. | 3 | 20 | 50x113 ft. | 2,800 00 |
| Engine house No. 29. | Section 33, T. 39, R. 14. | 2 | S. ‡ 9 15 & N. W. ‡ 18 | 24.7x136 ft. { 24x125 ft. | 2,100 00 |
| Engine house No. 30. | C. T. Subdivision W. ‡ Sec. 5, T. 39, R. 14. | 2 | ..... | 50x124 ft. | 1,400 00 |
| Engine house No. 31. | McGrath's Addition. | 22 | 1 | ..... | 4,500 00 |
| Engine house No. 32 and Hook and Ladder No. 9. | Lake Front. | ..... | ..... | ..... | ..... |
| Engine house No. 33. | Sheffield's Addition. | 17 | 13 | 25x124 ft. | 900 00 |
| Engine house No. 34. | Carpenter's Addition. | 43 | ..... | 25x115 ft. | 5,000 00 |
| Engine house No. 35. | E. Randolph Smith's Sub. of blk. 36 of Sheffield's Ad. S. W. ‡ of S. E. ‡, Sec. 31, 40, 14. | 31 & 32 | 36 | 48x121 ft. | 3,500 00 |
| Engine house No. 36. | Thompson's Subdivision of the S. ‡ block 6 of Laughton's Subdivision. | 24 & 25 | ..... | 48x134 ft. | 1,500 00 |
| Engine house No. 37. | Foot of La Salle st. | ..... | ..... | ..... | ..... |
| Engine house No. 38. | Chas. Mowry's Subdivision E. ‡ N. W. ‡ of W. ‡ N. E. ‡ Sec. 26, T. 39, R. 13; Kesler Hair's Subdivision of that part of block 3 No. of C. B. & Q. Railway. | 17 & 18 | 3 | { 34.6x69.5 & 125 ft. | 450 00 |
| Engine house No. 39. | Lumbard's Subdivision of the N. ‡ block 12, Canal Trustees' Subdivi- sion of the E. ‡ of Sec. 31, T. 39, R. 14 | 12 & 13 | 12 | 49x126.2 ft. | 1,200 00 |

REAL ESTATE OCCUPIED BY FIRE DEPARTMENT—CONTINUED.

| HOW OCCUPIED. | DESCRIPTION. | SUB-LOT OR LOT. | LOT OR S. BLOCK. | BLOCK. | SIZE. | VALUATION. |
|--|--|--|---------------------|--------------------|--|--|
| Engine house No. 40 and Hook and Ladder No. 6. | Original Town | 1 & 2 | 5 | 41 | 40.5x80 ft. | \$25,000 00 |
| Engine house No. 41. | Sampson's Slip | | | | | |
| Engine house No. 42. | Newberry's Addition | | 19 & 20 | 12 | 40x100 ft. | 5,000 00 |
| Engine house No. 43. | Atrill's Subdivision of Stave's Sub- division N. E. $\frac{1}{4}$ Sec. 36, T. 40, R. 13 | 17 & 18 | 2, 3, 5 | 1 | 61x110 ft. | 1,800 00 |
| Engine house No. 44. | Lee and others' Subdivision of the S. W. $\frac{1}{4}$ Sec. 12, T. 39, R. 13 | 21 & 22 | 3 | W. $\frac{1}{2}$ 8 | 50x170 ft. | 3,000 00 |
| Engine house No. 45 and Hook and Ladder No. 15. | Circuit Court partition of the E. 15 8-10 chains S. $\frac{1}{4}$ S. E. $\frac{1}{4}$ Sec. 3, T. 38, R. 14 | | 1 & 2 | 1 | 53x116 ft. | 2,250 00 |
| Engine house No. 46 and Hook and Ladder No. 17. | South Chicago Subdivision of C. & C., C. & D. Co., in Sections 5 and 6, T. 37, R. 15 | | 28 | 91 | $\left\{ \begin{array}{l} 184\frac{1}{2} \times 142\frac{1}{2} \text{ ft.} \\ 130 \times 11\frac{1}{2} \text{ ft.} \end{array} \right\}$ | $\left. \begin{array}{l} 2,500 00 \\ \end{array} \right\}$ |
| Engine house No. 47. | Cornell's Subdivision of Sections 26 and 35, T. 38, R. 14 (ex. N. 40 ft.) | | 9 & 10 | 46 | 87.6x100 ft. | 1,000 00 |
| Engine house No. 48. | Rawson & Akerly's Subdivision N. 74 rod N. E. $\frac{1}{4}$ Sec. 4, T. 38, R. 14. | S. 9 ft. $\left\{ \begin{array}{l} 41 \\ 42 \end{array} \right\}$ | | 6 | 34x110 ft. | 3,000 00 |
| Engine house No. 49. | Emery's Subdivision W. $\frac{1}{4}$ S. E. $\frac{1}{4}$ S. E. $\frac{1}{4}$ S. E. $\frac{1}{4}$ Sec. 6, T. 38, R. 14. | | 4 & 5 | | 48x120 ft. | 1,000 00 |
| Engine house No. 50. | Prout and Coleman's Re Subdivision E. 19 acres of S. 25 acres S. E. $\frac{1}{4}$ Section 4, T. 38, R. 14. | $\left\{ \begin{array}{l} 17, 18 \& \\ \text{S. 6 ft.} \\ \text{of 19} \end{array} \right\}$ | | 2 | 56x106 ft. | 2,500 00 |
| Engine house No. 51. | County Clerk's Subdivision B. 2 Skin- ner & Judd's Subdivision in N. E. $\frac{1}{4}$ Section 21, T. 38, R. 14. | | | 9 | 42x200 ft. | 2,500 00 |
| Engine house No. 52. | Leased ground | | | | | |
| Engine house No. 53. | Leased ground | | | | | |
| Engine house No. 54. | August Schorling's Subdivision of that part of N. 110 R. N. W. $\frac{1}{4}$ Sec. 33 T. 38, R. 14, E. of Vincennes road. | | 6 | 1 | $\left\{ \begin{array}{l} 50 \times 102.6 \\ \text{ft. } 51.15 \times \\ 91.8 \text{ ft.} \end{array} \right\}$ | $\left. \begin{array}{l} 1,000 00 \\ \end{array} \right\}$ |

| | | | | | | |
|--------------------------|--|------------------------------|-------------------------------------|-----------------|----------------------------|----------|
| Engine house No. 55..... | Edson's Subdivision E. $\frac{1}{2}$ out lots of blocks 10 and 13, in C. T.'s Subdivision E. $\frac{1}{2}$ Section 29, T. 40, R. 14 Boardman's Sub. of lots 1, 3 & 4, McGinnis <i>et al.</i> Sub. lt. 1, bl. 45, Sheffield's Ad. S. W. $\frac{1}{2}$ Sec. 29, T. 40, R. 14 McCreery Subdivision N. $\frac{1}{2}$ N. E. $\frac{1}{2}$ N. E. $\frac{1}{2}$ S. E. $\frac{1}{2}$ Sec. 1, T. 39, R. 13 East approach to 95th street bridge. Leased ground | S. $\frac{1}{2}$ | 85, 84 & } N. $\frac{1}{2}$ 83 } | ..... | 31 $\frac{1}{2}$ x 140 ft. | 2,500 00 |
| Engine house No. 56..... | Ginniss <i>et al.</i> Sub. lt. 1, bl. 45, Sheffield's Ad. S. W. $\frac{1}{2}$ Sec. 29, T. 40, R. 14 McCreery Subdivision N. $\frac{1}{2}$ N. E. $\frac{1}{2}$ N. E. $\frac{1}{2}$ S. E. $\frac{1}{2}$ Sec. 1, T. 39, R. 13 East approach to 95th street bridge. Leased ground | ..... | 12 | ..... | 32.6 x 141.18 | 1,000 00 |
| Engine house No. 57..... | McCreery Subdivision N. $\frac{1}{2}$ N. E. $\frac{1}{2}$ N. E. $\frac{1}{2}$ S. E. $\frac{1}{2}$ Sec. 1, T. 39, R. 13 East approach to 95th street bridge. Leased ground | ..... | 44 & 45 | ..... | 48 x 120 ft. | 1,600 00 |
| Engine house No. 58..... | Leased ground | ..... | ..... | ..... | ..... | ..... |
| Engine house No. 59..... | Leased ground | ..... | ..... | ..... | ..... | ..... |
| Engine house No. 60..... | Maria Hair's Subdivision Hopkins' Addition to Hyde Park, N. E. $\frac{1}{2}$ Section 14, T. 38, R. 14 | 7 | 23 & 24 | 60 | 25.85 x 90.26 ft | 3,500 00 |
| Engine house No. 61..... | Kedzie's Subdivision S. W. $\frac{1}{2}$ S. E. $\frac{1}{2}$ Section 9, T. 38, R. 14 | N 50 ft. of the E. 35.15 ft. | 1 | 1 | 50 x 133.15 ft. | 3,000 00 |
| Engine house No. 62..... | Stanwood's Subdivision S. $\frac{1}{2}$ S. $\frac{1}{2}$ S. W. $\frac{1}{2}$ N. W. $\frac{1}{2}$ Sec. 22, T. 37, R. 14 | ..... | 23 | 1 | 24 x 122.2 ft. | 800 00 |
| Engine house No. 63..... | Snow & Dickenson Subdivision in Wm. Hale Thompson's Addition, N. W. $\frac{1}{2}$ Section 23, T. 38, R. 13 | 40 & 41 | 2 | 1, 2 & 3 | 50 x 125 ft. | 3,000 00 |
| Engine house No. 64..... | T. B. Shout's Subdivision E. $\frac{1}{2}$ S. W. $\frac{1}{2}$ S. W. $\frac{1}{2}$ S. W. $\frac{1}{2}$ Sec. 17, T. 38, R. 14 | ..... | 18 | ..... | 31 x 124.75 ft | 700 00 |
| Engine house No. 65..... | Corwith's Re-Subdivision in W. $\frac{1}{2}$ S. E. $\frac{1}{2}$ Sec. 36, T. 39, R. 13 | ..... | 11 | 15 | 43.4 x 125.5 ft. | 1,100 00 |
| Engine house No. 66..... | Chas. H. Kehl's Sub. Geo. W. Clark's Sub. E. $\frac{1}{2}$ S. W. $\frac{1}{2}$ Sec. 13, T. 39, R. 13 | 29 & 30 | 2 | 17, 18, 23, 24, | 50 x 125 ft. | 2,300 00 |
| Engine house No. 67..... | Re-Subdivision of block 10 in Sub. of S. $\frac{1}{2}$ Sec. 10, T. 39, R. 13 | ..... | 25 | ..... | 27.4 x 136.2 ft. | 950 00 |
| Engine house No. 68..... | Beginning at a point in E. line of block 2, being the W. line of Columbia ave. 489.6 feet N. of the S. line of Sec. 34, T. 40, R. 13, thence S. along E. line of said block 50 feet, thence W. parallel with S. line of said Sec. 125 feet to a 16 foot alley, thence N. along E. line of said alley 50 feet, thence E. along S. line of a 16 foot, alley 125 feet to beginning..... | ..... | ..... | ..... | 50 x 125 ft. | 800 00 |

REAL ESTATE OCCUPIED BY FIRE DEPARTMENT—CONTINUED.

| HOW OCCUPIED. | DESCRIPTION. | SUB-LOT OR LOT. | LOT OR S. BLOCK. | SIZE. | VALUATION. |
|----------------------------------|--|-------------------------------|-----------------------------|------------------|------------|
| Engine house No. 69..... | Irving Park, S. E. $\frac{1}{4}$ Sec. 15, T. 40, R. 13..... | { S. 50 ft. | 17 | 50x156 ft. | \$ 600 00 |
| Engine house No. 70..... | Thos. Lyman's Subdivision in County Clerk's division of E. $\frac{1}{4}$ N. W. $\frac{1}{4}$ Sec. 18, T. 40, R. 14..... | 30 | 5 { 1, 2, 3, 4, 5 & 6 | 37.44x121.55 ft. | 1,500 00 |
| Engine house No. 71..... | Leased Ground..... | | | | |
| Engine house No. 72..... | Rohrer's Subdivision in Circuit Court Commissioner's partition of the N. E. $\frac{1}{4}$ of the N. W. $\frac{1}{4}$ and N. W. $\frac{1}{4}$ of the N. E. $\frac{1}{4}$ of Sec. 31, T. 38, R. 15..... | 12 | 5 | 30.5x124.3 ft | 1,150 00 |
| Engine house No. 73..... | Sisson & Newman's South Englewood Subdivision in S. W. $\frac{1}{4}$ Sec. 33, T. 38, R. 14..... | | 1 | 35x245 ft. | 1,000 00 |
| Engine house No. 74..... | Taylor's Sub. W. $\frac{1}{4}$ N. E. $\frac{1}{4}$ N. W. $\frac{1}{4}$ Sec. 17, T. 37, R. 15..... | | 11 | 25x120.65 ft. | 700 00 |
| Engine house No. 75..... | West Pullman Subdivision, N. W. $\frac{1}{4}$ and W. $\frac{1}{4}$ N. E. $\frac{1}{4}$ Sec. 28, 37, 14..... | | 22 & 23 | 55.4x123.4 ft. | 900 00 |
| Engine house No. 76..... | Drew's Subdivision in Simon's Sub- division S. E. $\frac{1}{4}$ Section 35, T. 40, R. 13..... | | 7 & E. $\frac{1}{4}$ 8 | 37.5x138.75 ft | 450 00 |
| Engine house No. 77..... | Merigold's Subdivision..... | | 43 & 44 | 48x125.8 ft. | 1,650 00 |
| Engine house No. 78..... | Buckingham's Second Addition to L. V. in N. E. $\frac{1}{4}$ Sec. 20, 40, 14..... | { 34 E. 11.38 ft. of 35 | 2 3 | 36.38x134 ft. | 2,250 00 |
| Engine house No. 79..... | Summerdale, Re-Subdivision lots 31 to 40, Louis E. Henry's Sub. S. W. $\frac{1}{4}$ N. W. $\frac{1}{4}$ Sec. 8, T. 40, R. 14..... | | 1 | 32x125 ft. | 1,000 00 |
| Engine house No. 80..... | Leased Ground..... | | | | |
| Engine house No. 81..... | Chas. H. Nix's Addition to South Chicago, frac. Sec. 12, T. 37, R. 14..... | | 24 | 24x125 ft. | 775 00 |
| Hook and Ladder house No. 2... | Original Town..... | 1 | 9 | 30x76 ft. | 18,000 00 |
| Hook and Ladder house No. 3..... | Newberry's Addition..... | | 14 | 25x100 ft. | 3,500 00 |

| | | | | | | |
|----------------------------------|--|---|-------------|--|--|----------|
| Hook and Ladder house No. 4..... | E. Frac. S. E. $\frac{1}{4}$ Sec. 21, T. 39, R. 14 | $\left\{ \begin{array}{l} 40 \\ W \frac{1}{4} 41 \end{array} \right\}$ | 2 to 5 | 45 | 36x142 ft. | 3,000 00 |
| Hook and Ladder House No. 10. | Sheffield's Addition: N. 30 ft. of S. 50 ft. .... | ..... | 5 | 1 | $\left\{ \begin{array}{l} 30 \times 127 \text{ ft.} \\ 24.5 \times 130.9 \text{ ft.} \end{array} \right\}$ | 5,000 00 |
| Hook and Ladder house No. 11. | N. 30 ft. of S. 50 ft. | 1 | 6 & 7 | 1 | | 1,950 00 |
| Hook and Ladder house No. 12... | Freeman's Addition N. W. $\frac{1}{4}$ N. E. $\frac{1}{4}$ Section 34, T. 39, R. 14. | $\left\{ \begin{array}{l} 46 \\ 76 \text{ \& } 77 \end{array} \right\}$ | 46 | B | 48x119.6 ft. | 1,800 00 |
| Hook and Ladder house No. 13. | Section 19, T. 39, N., R. 14 E. Harriet Farlin's Subdivision of that part S. of C. & N.-W. Ry. of E. $\frac{1}{4}$ N. E. $\frac{1}{4}$ N. W. $\frac{1}{4}$ S. E. $\frac{1}{4}$ Section 25, T. 40, R. 13. .... | ..... | 1 & 2 | 16 | $\left\{ \begin{array}{l} 18.5 \times 161 \\ 125.8 \times 117.1 \text{ ft} \end{array} \right\}$ | 750 00 |
| Hook and Ladder house No. 14. | Walsh and McMullen's Subdivision of S. $\frac{1}{4}$ S. E. $\frac{1}{4}$ Sec. 20, T. 39, R. 14. .... | ..... | 24 & 25 | 5 | 44.75x98 ft. | 4,200 00 |
| Hook and Ladder house No. 16. | Bogue's Subdivision S. E. $\frac{1}{4}$ S. E. $\frac{1}{4}$ W. of R. R., Sec. 14, T. 38, R. 14. .... | ..... | 1, 2, 3 & 4 | 4 | 128.5 x 125.12 ft. | 3,300 00 |
| Hook and Ladder house No. 18. | Newberry's Subdivision N. 1, 162.65 ft. E. $\frac{1}{4}$ N. E. $\frac{1}{4}$ ex. R. R. Section 8, T. 38, R. 14. | $\left\{ \begin{array}{l} S. \frac{1}{4} \\ \text{all of} \end{array} \right\}$ | ..... | $\left\{ \begin{array}{l} 2 \\ 3 \end{array} \right\}$ | 36x125 ft. | 5,000 00 |
| Hook and Ladder house No. 19. | Ogden's Addition. | W. 30 ft. | 42 | 3, 4 & 5 | 30x121 ft. | 6,500 00 |
| Hook and Ladder house No. 20. | Bates' Re-Subdivision N. E. $\frac{1}{4}$ S. W. $\frac{1}{4}$ ex., etc., Sec. 21, T. 38, R. 14. .... | ..... | 10 | 7 | 50x141 ft. | 1,000 00 |
| Hook and Ladder house No. 21. | Allgeld's Subdivision blocks 1, 2, 3, 4, 7, and N. $\frac{1}{4}$ of 6, in subdivision of that part N. E. of Lincoln avenue in N. W. $\frac{1}{4}$ of Sec. 29, T. 40, R. 14. .... | ..... | ..... | 37 | 27x88 ft. | 1,100 00 |
| Hook and Ladder house No. 22... | Jefferson, S. W. $\frac{1}{4}$ Sec. 9, T. 40, R. 13 | ..... | 1 | 39 | $\left\{ \begin{array}{l} 50 \times 122.8 \text{ ft.} \\ 52.1 \times 139.6 \text{ ft.} \end{array} \right\}$ | 300 00 |
| Hook and Ladder house No. 23. | A. Conrad's Subdivision of part of original lot 8, being the N. $\frac{1}{4}$ (ex. 208 ft.) Bowman's original Sub. in S. E. $\frac{1}{4}$ Sec. 12, T. 40, R. 14. .... | ..... | 4 & 5 | ..... | 50x125 ft. | 575 00 |
| Hook and Ladder house No. 24. | Unsubdivided part S. of and adjoining Grove st. between Depot st. and Vincennes av. in E. $\frac{1}{4}$ N. W. $\frac{1}{4}$ Sec. 17, T. 37, R. 14. .... | ..... | ..... | ..... | ..... | ..... |

REAL ESTATE OCCUPIED BY FIRE DEPARTMENT—CONTINUED.

| HOW OCCUPIED. | DESCRIPTION. | SUB-LOT OR LOT. | LOT OR S. BLOCK. | BLOCK. | SIZE. | VALUATION. |
|---|---|--------------------|---------------------|----------|--------------------|--------------|
| Hook and Ladder house No. 25. | F. H. Doland's Subdivision in Sec. 31, T. 41, R. 13. | N. 25 } ft. | 7 | 17 | 25x175 ft. | \$ 500 00 |
| Hook and Ladder house No. 26. | W. M. Derby's Subdivision, N. E. $\frac{1}{4}$ Sec. 15, T. 39, R. 13. | 47 & 48 | 47 & 48 | 4 | 51.42 x 121.40 ft. | 2,000 00 |
| Hose house No. 3. | C. & C., C. & D. Co.'s Subdivision N. E. $\frac{1}{4}$ S. E. $\frac{1}{4}$ and S. 5 acres S. E. $\frac{1}{4}$ N. E. $\frac{1}{4}$ Sec. 31, T. 37, R. 15. | | 6 | 13 | 32x118.88 ft. | 400 00 |
| Vacant, S. W. corner Franklin st. and Stewart ave. | Mayfair, W. $\frac{1}{2}$ N. W. $\frac{1}{4}$ Sec. 15, T. 40, R. 13. | | 1 | 35 | 50x125 ft. | 1,000 00 |
| 2547 W. Kinzie st. | Craft's Subdivision of S. E. $\frac{1}{4}$ N. E. $\frac{1}{4}$ Sec. 9, T. 39, R. 13. | | 35 | 8 | 25x125 ft. | 500 00 |
| 3451 Cottage Grove ave. | S. $\frac{1}{4}$ N. E. $\frac{1}{4}$ Sec. 34, T. 39, R. 14, Oakenwald | N. 25 } ft. | 12 | S. Tier. | 25x122 ft. | 2,500 00 |
| Vacant, 263-271 Courtland st. | Johnson's Subdivision E. $\frac{1}{4}$ S. E. $\frac{1}{4}$ Sec. 36, T. 40, R. 13. | | W. $\frac{1}{2}$ 67 | 1 | 48x124 ft. | 800 00 |
| Repair shop. | Hedenberg's Subdivision of block 18, School Section Addition. | | 27, 28 & 29 | | 75x120.37 ft. | 14,500 00 |
| Fire-alarm telegraph. | Boardman's Subdivision of lots 1, 3, and 4, McGinnis <i>et al.</i> Subdivision lot 1, block 45, Sheffield's Addition S. W. $\frac{1}{4}$ Section 29, T. 40, R. 14. | | 12 | | 32.6x141.18 ft. | 1,300 00 |
| Vacant, 1111 South place. | R. C. Hall's Addition to Argyle, S. $\frac{1}{2}$ S. W. $\frac{1}{4}$ Section 8, T. 40, R. 14. | 13 | Except 1, 2 & 3 | 1 | 25x138.46 ft. | 1,250 00 |
| Total Real Estate occupied by Fire Department. | | | | | | \$173,925 00 |

BUILDINGS OCCUPIED BY FIRE DEPARTMENT.

| NUMBER. | LOCATION. | BUILDING. | VALUATION. |
|--------------------------------|---|--------------------------------|-------------|
| No. 1—Engine Co. | 269 and 271 Fifth avenue | Double Three-story Brick | \$17,500 00 |
| Water Tower Co. | 2421 and 2423 Sanger street | Two-story Brick | 6,800 00 |
| No. 2—Engine Co. | 86 West Erie street | Three-story Brick | 8,000 00 |
| No. 3—Engine Co. | 524 N. Halsted street | Two-story Brick | 10,000 00 |
| No. 4—Engine Co. | 195 and 197 S. Jefferson street | Two story Brick | 14,500 00 |
| No. 5—Engine Co. | 143 Maxwell street | Two-story Brick | 7,500 00 |
| No. 6—Engine Co. | 31 Blue Island avenue | Two-story Brick | 7,500 00 |
| No. 7—Engine Co. | 1933 Archer avenue | Two-story Brick | 7,500 00 |
| No. 8—Engine Co. | 2527 Cottage Grove avenue | Two-story Brick | 8,000 00 |
| No. 9—Engine Co. | 82 and 84 Pacific avenue | Three-story Brick | 21,500 00 |
| No. 10—Engine Co. | 225 Michigan street | Two-story Brick | 7,000 00 |
| and | 611 West Lake street | Two-story Brick | 9,000 00 |
| No. 1—Hook and Ladder Co. | 19 Dearborn street | Three-story Brick | 12,500 00 |
| No. 11—Engine Co. | 36 and 38 Chicago avenue | Two-story Brick | 15,500 00 |
| No. 12—Engine Co. | 373 and 375 W. Twenty-second street | Two story Brick | 7,000 00 |
| No. 13—Engine Co. | 349 Thirty-first street | Two-story Brick | 8,000 00 |
| No. 14—Engine Co. | 78 and 80 West Lake street | Two-story Brick | 9,000 00 |
| Storehouse | 438 and 440 West Twelfth street | Two story Brick | 16,500 00 |
| No. 15—Engine Co. | 3444 Rhodes avenue | Three-story Brick | 12,000 00 |
| No. 16—Engine Co. | 73 Rawson street | Two-story Frame | 2,000 00 |
| No. 17—Engine Co. | 13 Taylor street | Two story Brick | 7,000 00 |
| No. 18—Engine Co. | 458 and 460 Webster avenue | Three-story Brick | 11,000 00 |
| and | 693 Hinman street | Two-story Brick | 6,500 00 |
| No. 5—Hook and Ladder Co. | 542 and 544 Warren avenue | Two-story Brick | 9,000 00 |
| No. 19—Engine Co. | | | |
| No. 20—Engine Co. | | | |
| No. 21—Engine Co. | | | |
| No. 22—Engine Co. | | | |
| No. 23—Engine Co. | | | |
| No. 24—Engine Co. | | | |

BUILDINGS OCCUPIED BY FIRE DEPARTMENT—CONTINUED.

| NUMBER. | LOCATION. | BUILDING. | VALUATION. |
|---------------------------------|---|-----------------------------------|-------------|
| No. 25—Engine Co. | 127 Canalport avenue | Two-story Brick. | \$ 7,000 00 |
| No. 26—Engine Co. | 150 and 152 North Lincoln street. | Two-story Brick. | 12,000 00 |
| and | | | |
| No. 7—Hook and Ladder Co. | 433 and 435 Wells street. | Two story Brick. | 7,000 00 |
| No. 27—Engine Co. | 2967 and 2969 Deering street. | Two-story Brick. | 11,000 00 |
| No. 28—Engine Co. | | | |
| and | | | |
| No. 8—Hook and Ladder Co. | 846 and 848 Thirty-fifth street. | Two-story Brick. | 7,000 00 |
| No. 29—Engine Co. | 514 North Ashland avenue. | Two-story Brick. | 11,000 00 |
| No. 30—Engine Co. | 756 and 758 West Congress street. | Two-story Brick. | 10,000 00 |
| No. 31—Engine Co. | | | |
| No. 32—Engine Co. | Foot of Monroe street, Lake front | Double Two-story Brick. | 20,000 00 |
| and | | | |
| No. 9—Hook and Ladder Co. | 150 Southport avenue | Two-story Frame, Brick Barn. | 2,500 00 |
| No. 33—Engine Co. | 19 South Curtis street | Three-story Brick. | 12,000 00 |
| No. 34—Engine Co. | 872 N. Robey street | Two-story Brick. | 9,000 00 |
| No. 35—Engine Co. | 241 and 243 Coulter street | Two-story Brick. | 11,000 00 |
| No. 36—Engine Co. | Foot of La Salle street | One-story Brick. | 2,000 00 |
| No. 37—Engine Co. | 1071 and 1073 Bonney avenue | Two-story Brick. | 7,500 00 |
| No. 38—Engine Co. | 1326 and 1328 Thirty-third court | Two-story Brick. | 10,000 00 |
| No. 39—Engine Co. | | | |
| No. 40—Engine Co. | 88 and 85 Franklin street. | Three-story Brick. | 17,500 00 |
| and | | | |
| No. 6—Hook and Ladder Co. | Sampson Slip | Building Leased. | |
| No. 41—Engine Co. | 77 and 79 Illinois street | Three-story Brick. | 12,000 00 |
| No. 42—Engine Co. | 179 and 181 Slave street | Two-story Brick. | 5,500 00 |
| No. 43—Engine Co. | 1494 W. Lake street | Two-story Brick. | 8,000 00 |
| No. 44—Engine Co. | | | |
| No. 45—Engine Co. | 4600 and 4602 Cottage Grove avenue | Two-story Frame. | 6,000 00 |
| and | | | |
| No. 15—Hook and Ladder Co. | | | |

| | | | |
|---------------------------------|---|------------------------------------|-----------|
| No. 46—Engine Co. | South Chicago av. and Ninety-third st. | Two-story Frame. | 6,000 00 |
| No. 17—Hook and Ladder Co. | | | |
| No. 47—Engine Co. | Dolson avenue and Kedder court | Two-story Frame. | 1,200 00 |
| No. 48—Engine Co. | 4005 Dearborn street. | Two-story Frame. | 3,500 00 |
| No. 49—Engine Co. | 743 Forty-seventh street. | Two-story Frame. | 2,500 00 |
| No. 50—Engine Co. | 4649 and 4651 Wentworth avenue | Two-story Brick. | 7,000 00 |
| No. 51—Engine Co. | 6345 Wentworth avenue. | Three-story Brick. | 8,000 00 |
| No. 52—Engine Co. | Forty-sixth street and Center avenue. | Two-story Frame—on leased ground | 2,000 00 |
| No. 53—Engine Co. | Fortie'h street and Packers avenue. | Two-story Frame—on leased ground | 2,000 00 |
| No. 54—Engine Co. | Vincennes avenue, between Eightieth and Eighty-first streets. | Two-story Frame. | 2,000 00 |
| No. 55—Engine Co. | 687 Sheffield avenue. | Two-story Brick. | 7,000 00 |
| No. 56—Engine Co. | 144 Noble avenue. | Two-story Frame. | 2,500 00 |
| No. 57—Engine Co. | 548 and 545 Jave street. | Two-story Brick. | 11,000 00 |
| No. 58—Engine Co. | West approach on 95th street bridge. | One-story and Basement Frame. | 2,000 00 |
| No. 59—Engine Co. | Corner Broadway and Morgan streets. | Two-story Brick. | 1,500 00 |
| No. 60—Engine Co. | 324 Fifty-fifth street. | Two-story Frame. | 3,900 00 |
| No. 61—Engine Co. | 5300 Wentworth avenue. | Two-story Frame. | 3,000 00 |
| No. 62—Engine Co. | 11453 Michigan avenue. | Two-story Frame. | 3,500 00 |
| No. 63—Engine Co. | 6328 Jackson avenue. | Two-story Brick. | 7,000 00 |
| No. 64—Engine Co. | 6244 Laflin street. | Two-story Frame. | 3,500 00 |
| No. 65—Engine Co. | 2140 West Thirty-ninth street. | Two-story Frame. | 3,500 00 |
| No. 66—Engine Co. | 1423 Fillmore street. | Two-story Brick. | 10,000 00 |
| No. 67—Engine Co. | 2436 West Fulton street. | Two-story Frame. | 3,500 00 |
| No. 68—Engine Co. | West Forty-fourth street, between North and Wabansia avenues. | Two-story Frame. | 3,500 00 |
| No. 69—Engine Co. | Selwyn avenue, Irving Park. | Two-story Frame. | 1,700 00 |
| No. 70—Engine Co. | 316 Jamot street. | Two-story Frame. | 3,000 00 |
| No. 71—Engine Co. | 489 and 491 N. Branch street. | Leased. | |
| No. 72—Engine Co. | 7914 Duncan avenue. | Two-story Frame. | 2,600 00 |
| No. 73—Engine Co. | 8630 Emerald avenue. | Two-story Frame. | 2,500 00 |
| No. 74—Engine Co. | N. E. Cor. 106th street and Ewing av. | Two story Frame. | 1,600 00 |
| No. 75—Engine Co. | N. W. Cor. Desplaines and 121st street. | Two-story Frame. | 3,000 00 |
| No. 76—Engine Co. | 824 Courtland street. | Two story Frame. | 2,000 00 |
| No. 77—Engine Co. | 1222 W. 40th place. | Two story Frame. | 3,000 00 |
| No. 78—Engine Co. | 1306 Waveland avenue. | Two-story Frame. | 2,500 00 |

BUILDINGS OCCUPIED BY FIRE DEPARTMENT - CONTINUED.

| NUMBER. | LOCATION. | BUILDING. | VALUATION. |
|---|--|-----------------------------------|--------------|
| No. 79—Engine Co. | 3197 North Ashland avenue..... | Two-story Frame..... | \$ 1,800 00 |
| No. 80—Engine Co. | 108th and Stephenson streets, Pullman... | Leased. | |
| No. 81—Engine Co. | N. W. Cor. 105th street and Hoxie av. | Two-story Frame..... | 1,500 00 |
| No. 2—Hook and Ladder Co. | 49 West Washington street | Three-story Brick..... | 9,500 00 |
| No. 3—Hook and Ladder Co. | 177 Erie street | Three-story Brick..... | 12,000 00 |
| No. 4—Hook and Ladder Co. | 322 Twenty-second street | Two-story Brick..... | 8,000 00 |
| No. 10—Hook and Ladder Co. | 409 Larrabee street..... | Two-story Brick..... | 7,000 00 |
| No. 11—Hook and Ladder Co. | 83 Eda street..... | Three-story Brick..... | 11,000 00 |
| No. 12—Hook and Ladder Co. | 1245 W. Thirteenth street | Three-story Brick..... | 12,000 00 |
| No. 13—Hook and Ladder Co. | 401 Hoffman avenue | Two story Frame..... | 2,000 00 |
| No. 14—Hook and Ladder Co. | 76½ and 78 West Nineteenth street | Three-story Brick..... | 11,000 00 |
| No. 16—Hook and Ladder Co. | Madison avenue and Sixty-second court. | Two-story Frame..... | 2,000 00 |
| No. 18—Hook and Ladder Co. | 4738 S. Halsted street..... | Two-story Brick..... | 10,000 00 |
| No. 19—Hook and Ladder Co. | 237 West Chicago avenue..... | Two-story Brick..... | 10,000 00 |
| No. 20—Hook and Ladder Co. | 550 Sixty-ninth street..... | Two-story Frame..... | 2,200 00 |
| No. 21—Hook and Ladder Co. | 824 Belmont avenue | Two-story Frame..... | 2,000 00 |
| No. 22—Hook and Ladder Co. | Foster street and Lincoln avenue..... | One and one half-story Frame..... | 1,000 00 |
| No. 23—Hook and Ladder Co. | S. E. Cor. Short and Our streets..... | Two-story Brick and Frame..... | 1,000 00 |
| No. 24—Hook and Ladder Co. | S. W. Cor. Grove st. and Vincennes av. | Two-story Frame..... | 3,500 00 |
| No. 25—Hook and Ladder Co. | S. E. Cor. Jackson av. and N. Clark st. | Two-story Brick..... | 3,000 00 |
| No. 26—Hook and Ladder Co. | 1985 Wilcox avenue..... | Two-story Frame..... | 2,500 00 |
| No. 3—Hose Co. | 134th street and Superior avenue..... | Two-story Frame..... | 1,000 00 |
| Repair Shop..... | 175 Sebor street | Two-story Frame..... | 15,000 00 |
| Fire Alarm Telegraph..... | 435 Southport av. | Two-story Frame..... | 2,500 00 |
| Unoccupied..... | 8451 Cottage Grove av | Two-story Frame..... | 2,500 00 |
| Unoccupied..... | 2547 W. Kinzie street | Two-story Frame..... | 100 00 |
| Total Buildings occupied by Fire Department. | | | \$689,900 00 |

FIRE APPARATUS.

| | |
|--|--------------|
| Fire-Boats | \$ 80,000 00 |
| Water Towers..... | 9,500 00 |
| Steam Fire Engines | 370,000 00 |
| Chemical Fire Engines..... | 17,400 00 |
| Chemical Engines and Hose Carts Combined..... | 8,000 00 |
| Steam Heaters | 9,600 00 |
| Hook and Ladder Trucks | 49,500 00 |
| Four-wheel Hose Carts..... | 19,000 00 |
| Two-wheel Hose Carts | 8,050 00 |
| Hose Wagons | 14,400 00 |
| Supply Wagons | 1,000 00 |
| Fuel Wagons..... | 2,500 00 |
| Fire Marshals' Wagons | 5,500 00 |
| Chemical Extinguishers and Portable Pumps | 800 00 |
| Siamese Connections..... | 4,600 00 |
| Horses | 52,250 00 |
| Relief Valves | 7,200 00 |
| Hose | 88,837 00 |
| Tools and Machinery, Repair Shop..... | 12,525 00 |
| Stock and Supplies, Repair Shop | 6,775 00 |
| Engine Patterns..... | 2,300 00 |
| Furniture, Beds and Bedding..... | 50,000 00 |
| Harness, Horse Blankets and Stable Furniture.. | 10,000 00 |
| Stationery and Office Supplies | 1,000 00 |
| Steam Heating Apparatus..... | 12,500 00 |
| Hose Pipes, Nozzles, Ladders, Rope, etc..... | 10,000 00 |
| Department Badges, Caps Devices and Buttons. | 1,500 00 |
| Miscellaneous Supplies, Store Room..... | 510 00 |
| Total | \$855,247 00 |

SALARIES, 1897.

| | |
|--|-------------|
| Fire Marshal and Chief of Brigade | \$ 6,000 00 |
| First Assistant Fire Marshal and Dept. Inspector | 4,500 00 |
| Second Assistant Fire Marshal | 3,500 00 |
| Third Assistant Fire Marshal | 3,200 00 |
| Assistant Fire Marshal and Secretary | 3,600 00 |
| Fire Inspector | 2,750 00 |
| Chiefs of Battalion | 2,750 00 |
| Captains, first class | 1,650 00 |
| Captains, second class | 1,450 00 |
| Lieutenants, first class | 1,290 00 |
| Lieutenants, second class | 1,200 00 |
| Engineers, first class | 1,380 00 |
| Engineers, second class | 1,260 00 |
| Assistant Engineers, first class | 1,150 00 |
| Assistant Engineers, second class | 1,050 00 |
| Pipemen, Truckmen and Drivers, first class | 1,134 00 |
| Pipemen, Truckmen and Drivers, second class ... | 1,050 00 |
| Pipemen, Truckmen and Drivers, third class | 960 00 |
| Pipemen, Truckmen and Drivers, fourth class ... | 840 00 |
| Pilots | 1,260 00 |
| Candidates | 800 00 |
| Stokers | 1,050 00 |
| Watchmen and Hostlers | 800 00 |
| Chief Clerk | 2,000 00 |
| Clerks | 1,800 00 |
| Storekeeper | 1,400 00 |
| Superintendent of Horses (including medicine)... | 2,400 00 |

FIRE ALARM TELEGRAPH.

 MAIN OFFICE.

| | |
|--------------------------------------|-------------|
| Superintendent | \$ 4,500 00 |
| Assistant Superintendent | 2,750 00 |
| Chief of Construction | 2,000 00 |
| Operators | 1,600 00 |
| Assistant Operators | 1,260 00 |
| Bookkeeper | 1,200 00 |
| Repairers | 1,102 50 |
| Linemen and Batteryman | 945 00 |
| Chief Electric Repair Shop | 1,800 00 |
| Machinist | 1,050 00 |
| Assistant Machinists | 756 00 |
| Drivers | 620 00 |
| Chief Electric Light Inspector | 1,500 00 |
| Electric Light Inspectors | 1,200 00 |

BRANCH OFFICE.

| | |
|--------------------------------|-------------|
| Assistant Chief Operator | \$ 1,800 00 |
| Operators | 1,200 00 |
| Repairers | 1,000 00 |
| Linemen | 945 00 |
| Batteryman | 900 00 |

Section IV.

BIENNIAL REPORT

OF THE

Department of Health

OF THE

CITY OF CHICAGO

BEING FOR THE

Years 1895 and 1896



WILLIAM R. KERR

COMMISSIONER OF HEALTH

CHICAGO

1897



DEPARTMENT OF HEALTH

CITY OF CHICAGO

1895-1896

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PART I.

REPORTS
OF
Divisions and Bureaus

Reports of the Division of Contagious Diseases.

E. GARROTT, M. D., *Chief Medical Inspector.*

HON. WILLIAM R. KERR,
Commissioner of Health.

DEAR SIR: I have the honor to submit, for your consideration, my biennial report for the years 1895-1896:

One of the first acts under your administration was a reform sanitary measure of great hygienic value, the results of which are far reaching, and its beneficial effects cannot be estimated too highly. I refer to the abolishment of the custom of vaccinating in the City Hall. Formerly the basement corridors and many of the rooms were daily crowded with children of all ages and social conditions awaiting vaccination, and the congregation of children, with their parents and friends, has always been a fruitful cause of contagion dissemination. In such a motley multitude there would be many from districts infected with scarlet fever, measles, diphtheria, chicken-pox, or various infectious dermatoses, and some perhaps actually suffering from these morbid conditions.

These infected children would be literally packed in with the healthy ones for hours. When leaving the City Hall the children might carry to widely distant parts of the city morbid micro-organisms, and there create new foci of disease in different sections of the city. The exposure these little ones were subject to in bringing them from distant parts of the city favored the occurrence of such diseases as pneumonia, bronchitis, etc. I firmly believe that many infectious and

contagious disorders have become endemic because of the noxious substances conveyed from the City Hall, and the possibility that an outbreak of a general epidemic might originate under these conditions need only be mentioned.

To take care of these cases there was appointed, at the request of the ASSISTANT COMMISSIONER, a staff of vaccinators, interpreters, quarantine officers and competent assistants, whose work proved the soundness of your judgment, and who rendered most valuable service in connection with sanitary science. Such a staff had always been required, and the fruits of their labors demonstrated their need. This last year the emergency staff has been reinforced and the work extended, being now merged into the public vaccinating corps and sustained by the vaccinating fund. The duties of the members of this corps consist of attention to vaccination.

There are in our city upward of 230 public schools, attended by about 208 000 children, and the economical administration of this work may be appreciated when it is noted that this large number of children has been attended to, and also, all vaccinations outside of the public schools have been performed, including parochial schools, lodging houses, police stations, the County Agent's office, etc., the total sum expended being within \$25 000. These vaccinators are obliged to dive into the lowest strata of the city; they have to invade the underground hovels of uneducated people living in filth, and perhaps too often opposed to vaccination and all sanitary aids; they must visit the lodging houses and police stations, and come in direct contact with the great army of tramps and criminals that infest a city like Chicago, and fully eight-tenths of their work must be accomplished by means of diplomacy, suavity and tact. We have been particularly fortunate as to the membership of this corps of vaccinators. Taking into account the variety of the work, and its magnitude, we are surprised at finding the complaints

that have reached us can be counted on the fingers of one hand. I feel perfectly safe in saying that the protection afforded by this corps is absolute, the vaccinations being performed with the greatest care, and special observation being given to results. Today our public school children are perfectly immunized as far as smallpox is concerned, and an unvaccinated tramp or criminal cannot be longer than a few days in either lodging house, station or jail before he is discovered and operated upon until a successful result has been attained. An unprotected stranger, or a newly arrived family reaching the poorer districts, cannot remain long undiscovered, as house-to-house canvasses are being continually made. The lodging-house districts have always been troublesome and dangerous battle grounds during an epidemic of smallpox. I am pleased to say that with the assistance of the proprietors, as they aid us at present, we will have no trouble in successfully combating the foe.

Most important is the work of this kind that has been done through the County Agent's office. Applicants for relief are closely examined as to their individual condition with relation to vaccination; the number of persons in each family is looked into, how many children, their ages, the schools they attend, and the addresses of all concerned. Each case is thoroughly investigated, vaccinations are performed at once, in the office when necessary, and the localities from whence these applicants come are visited by members of the vaccinating corps, and the individuals found therein are given care. Some of the men connected with this vaccinating corps attend only to primary vaccinations—that is, children before school age, or between three months and six years of age. This part of the work is really very much more important than at first sight appears. Our children are not eligible for admission into the public schools until they are six years old. In a very large number of

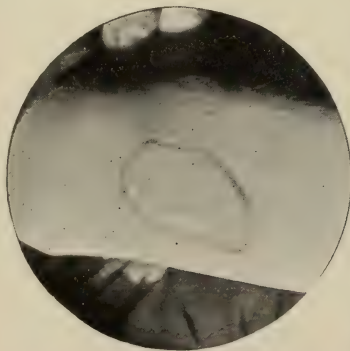
children the first six years of life would be a dangerous period as far as smallpox is concerned, as during this time the young ones would be unprotected. By our present system, however, this danger period is circumvented, and a large number of children in the future, on presenting themselves for school enrollment, will be found to possess typical vaccine scars. Continuous vaccination from year to year, in a great city, is an absolute necessity and will be the means of not only preventing enormous loss of life, but also of saving millions of dollars.

In former times attention to vaccination was confined to the public-school children only, and no care was given to the very large numbers of people constituting the rest of the population. Suddenly an epidemic of smallpox would appear and at once attempts at general vaccination would be made; perhaps only to be met with determined opposition by those who disregarded the danger or denied the efficacy of the procedure. A large number of unprotected persons thus would exist, constituting excellent ground for the growth and propagation of the scourge, and the loss of life and property would be fearful. By, however, constantly maintaining immunization there is no ground left for the seed to grow, and the people are daily educated to correctly understand the value of the method. So soon as this view of the subject was laid before the members of the Finance Committee of the City Council they realized the urgent responsibility placed upon them and granted the necessary appropriation.

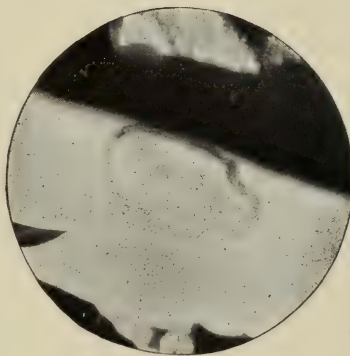
It is with pleasure that I call attention to our particularly good fortune in obtaining the purest and most efficient vaccine ever used by the DEPARTMENT. It was not until an urgent protest was made by your ASSISTANT COMMISSIONER OF HEALTH against the exposed ivory-point method of vaccination, that the liquid vaccine in hermetically sealed tubes

ILLUSTRATIONS FROM PHOTOGRAPHS OF VACCINAL CICATRICES, TAKEN BY DR. C. ST. C. DRAKE DURING OCTOBER, 1895, SHOWING THE DIFFERENCE IN THE CICATRICES RESULTING FROM VACCINE POINTS AND FROM LIQUID VACCINE.

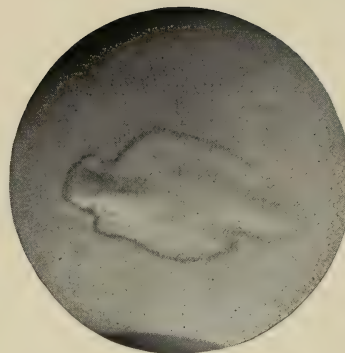
FROM VACCINE POINTS.



Ida P.—*et.* 12. Vaccinated in 1890. Scar $1\frac{1}{2} \times 2\frac{1}{2}$ inches.

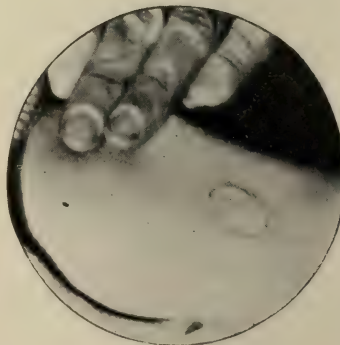


Minnie C.—*et.* 12. Vaccinated in 1890. Scar $2\frac{1}{4} \times 1$ inches.

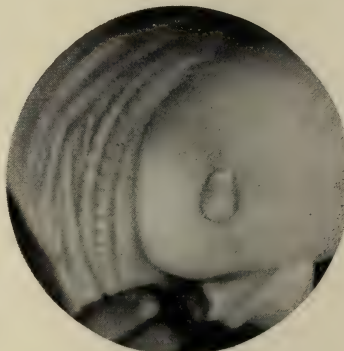


Fritz H.—*et.* 11. Vaccinated in 1893. Scar $2\frac{1}{2} \times 4\frac{3}{4}$ inches.

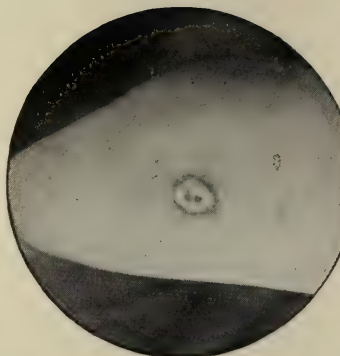
FROM LIQUID VACCINE.



Carrie A.—*et.* 9. Vaccinated September 6, 1895.



Alice A.—*et.* 6. Vaccinated September 13, 1895.



Wilhelmina V.—*et.* 10. Vaccinated September 19, 1895.

was adopted. This fluid vaccine, since its adoption, has proved continuously to be bacteriologically pure and clinically successful, excellent results following in from ninety to ninety-seven (90-97) per cent., during its use. Each and every shipment receives thorough and careful testing before any of the material is used. Four visits have been made to the farm where it is prepared under the personal supervision of the proprietor, the surroundings have been determined by us to be eminently satisfactory, and our observations and examinations have demonstrated to us that the conditions under which every detail is conducted are governed by aseptic precautions. This vaccine is developed from the healthiest calves, from four (4) to six (6) weeks of age, and is put up in hermetically-sealed glass tubes, each tube containing a sufficient quantity for one operation. During the many years that I have been connected with the HEALTH DEPARTMENT of this city, I have never found any vaccine that was so promptly and uniformly successful in producing typical results. I have noted in using this fluid vaccine a diminution of the usual inflammatory areola surrounding the vaccine vesicle, less constitutional disturbance, freedom from suppurating sores, inflamed glands and lymph vessels, etc., and it produces a more active and typical vesicle than occurs with virus dried upon an ivory or quill point, and the element of secondary or adventitious infection can, with simple precaution, be entirely eliminated.*

The *modus operandi* is simple: The part to be vaccinated is thoroughly cleaned and two or three single scratches or shallow incisions are made, half an inch long and one inch apart. Then we break off both ends of the glass tube, drop the fluid vaccine upon the little wound,

*The accompanying illustrations are from photographs of the vaccinal cicatrices of children vaccinated in the old way with the "point" and of those vaccinated with the fluid vaccine.—F. W. R.

gently rub it in, allow it to dry and apply a loose sterile pad. We can confidently anticipate the most favorable results.

The establishment of a permanent emergency staff with interpreters, quarantine officers, and competent assistants, cannot be too highly commended in connection with the suppression and prevention of smallpox. The retention of this corps, ready and able to respond at all times, and at all hours, means that smallpox can never again become epidemic in our municipality. Equipped as the DEPARTMENT is today with educated medical men of undoubted ability, and armed with the "sure-shot vaccine," it is absolutely impossible for smallpox to spread. Our city is now better protected than it has ever been before, and I believe in this regard it is one of the best protected cities in the world. It is with pleasure that I note the fact that within the past two years some 350 notices have been sent to the DEPARTMENT from members of the medical profession, calling attention to suspected or suspicious cases, and that none of these cases proved to be smallpox. The fact demonstrates the confidence the profession has in the DEPARTMENT, realizing that our desire is fully to co-operate with them, and further, that they appreciate the fact that no criticism can fall upon them in calling upon the DEPARTMENT for any aid or assistance that is in our power to give. Such action on the part of the medical profession is very commendable, as many an epidemic might easily have been initiated by a physician waiting too long before calling upon us, when he had under his care a more or less marked case of smallpox which, had it been recognized earlier, could have been isolated and the spread of contagion prevented.

An important feature of work in this connection was the supplying of food and necessities to those quarantined in houses wherein smallpox or other quarantinable disease existed. This year (1896), while there has been no smallpox,

this important work has been continued in connection with the quarantining of localities in consequence of the existence of infectious and contagious diseases, other than smallpox. Such a plan is both humane and necessary. Among the poor, and in infected places, the establishment of proper quarantine restrictions without attention to the pressing needs of the isolated individuals would be impracticable, since, driven by hunger and want, the unfortunates would break out of all bonds, and wander hither and thither in spite of opposition.

A particular reason why in Chicago ceaseless vigilance in connection with these infectious and contagious diseases is so requisite, and why such vigilance is so difficult to maintain, is to be found in the heterogeneous character of our population. Here, within the boundaries of our municipality, we find contained many separate and distinct nationalities, each one possessing its own peculiarities. Thus we have Polish settlements, Italian and Greek colonies, Russian villages, Bohemian towns, Armenian hamlets, Chinese quarters, etc., in many of which English is an unknown tongue. Here the people are engaged in a struggle merely for the maintenance of existence, and without having time or education sufficient to permit them to consider the questions involved in their sanitary conditions. Many of these persons have lately left countries wherein they had been subjected to oppression, and any attempt at insisting on their adopting measures, no matter how salutary, which they cannot fully understand, is at once met by violent and determined opposition. A review of these various elements will indicate the delicate manner in which these people have to be approached in order to exact compliance and coöperation on their part; but the questions and issues that have arisen have all been satisfactorily met by those engaged in the work. As proof of the efficiency of the vaccinating corps and the thoroughness

of disinfection, it may be remarked that not a case of smallpox has occurred in over a year, the last case of smallpox within our gates having been discovered on the 2nd day of December, 1895. In the various cities and towns around us there have been sporadic cases of variola, and some infected patients have passed through Chicago without producing any malefic effect.

During your administration the disinfecting van has proven of great value and has been almost in constant use. On account of this apparatus many things and articles have been subjected to disinfection and saved, which, under the old plan, would have either been destroyed or left infected. No one can dispute the efficacy of disinfection by heat under high tension, and by this means much loss has been averted and safety assured.

In connection with the details of the previously described work I feel that credit should be given to the interpreters, the provision porter and the officers loaned to us by the police authorities, some of whom have been engaged in this line of work for long periods of time, and have shown themselves to be faithful and trustworthy in the performance of their respective duties. I desire also to tender my most sincere thanks to our distinguished Superintendent of Police, the Hon. J. J. BADENOCH, for his readiness and willingness, whenever called upon, to aid us.

Perhaps it might be well here to tabulate the work of the regular Medical Staff, which has been extended and which has been most carefully performed.

First. School inspection and verification of vaccinal certificates. In the early part of the year after the arrest of smallpox and the cessation of the duties appertaining to the protection of individuals in infected foci, these gentlemen took up school inspection. They examined the pupils, comparing their arms with the certificates previously given, and

in all these cases wherein typical scars were not discovered re-vaccination was insisted upon until immunization was believed to exist. In this relation it must be understood that vaccination is not in the usual sense of the word "compulsory." All that is done is the enforcement of the regulation that no child will be permitted to attend the public schools without being protected from smallpox by vaccination. In case of chronic ailment, debility, or any condition incompatible with vaccination, when certified to that effect by the family physician, the performance of the operation will be deferred and the child provisionally may attend classes; but monthly certificates are required as to the child's health, and as soon as practicable vaccination is demanded. During the year only two children have been so admitted to school, and but three have applied for permission to attend school without vaccination, and on having been refused have remained away. Others so applying having been amenable to reason, and taking the advice of the DEPARTMENT officials have submitted to vaccination, and were enrolled in the proper school division. The extremely small number of contumacious and persistent objectors to vaccination, I believe, is due to the painstaking care of our officers in perseveringly arguing the benefits of the operation, thus overcoming fancied or real prejudices. Having personally attended to each and every one of these cases, I am convinced that gentle and firm persuasion is the only plan to be pursued, and that any forcible antagonistic measures would only increase the number of objections and make the opposition only the more intense and more positive.

The second subdivision of the work of the Staff of Medical Inspectors is as follows: The entire city has been divided into eight districts, and to each district is assigned a Medical Inspector. On the report of a death, reaching the Bureau of Vital Statistics, from diphtheria, cholera infantum, typhoid fever, or any of the infectious diseases, the Medical Inspector

in whose district the death occurred is notified; then it becomes his duty to visit the particular locality, to inspect the sanitary conditions of the surroundings, to put in force all necessary precautions so far as preventing the spread of contagion is concerned, and more especially, in case of typhoid fever, to look after infection sources, as, for instance, the water or milk supply. It early became apparent that both the water and milk supplies were potent factors in spreading infection. In both these articles the chemical and bacteriological researches of the DEPARTMENT were very thorough. Traders were given to understand that the legal standard must be maintained, and public and private warnings were sent out at such times when the examinations of the drinking water showed it not to be safe for internal use. Each Inspector is supplied with printed pamphlets prepared by the ASSISTANT COMMISSIONER concerning the restriction and prevention of consumption and other preventable diseases, the care of infants and young children in hot weather, etc. These are gratuitously distributed, and have become very popular, as evidenced by the fact that numerous requests have been made for supplies of copies.

The third subdivision of the work of the Staff of Medical Inspectors is the examination of areas and sections of the city in which the death rate has been found too high, to examine into the cause or causes thereof, to make house-to-house canvasses, and to abate or correct, as far as practicable, all unsanitary conditions. An example of this work is to be noted in connection with the 33rd and 34th wards in the southeast section of the city. On examining the state of affairs, it was found that large numbers of poor people had settled in localities near the seat of their employment, and that the houses were built on stilts. There were in many places no sewers, or where the sewer pipes had been put in a connection between the water-closets and the sewer had

not been established. There were foul pools of water here and there, and the hygienic environments were the worst possible. So urgent was the state of affairs that the Department of Public Works was called upon for aid, and immediately prompt measures were enforced with the result that in about two months a sanitary revolution was effected. Drainage was accomplished by establishing connections between the pools of stagnant water and the city sewer system; lime was freely scattered around in the places where the pools had been, and also in the gutters. Wherever sewers had been built, the privy-vaults were abolished and water closets were ordered put in houses, and then connected with the drain pipes in the street, so that the flushings of the privy vaults could be properly removed, instead of as formerly permitted to flow into the streets. A complete census was taken, and diagrams made of each house, and the surrounding out-houses, and full information obtained including the names of owners and tenants of houses. Considering the enormous number of abatements secured by us, and the necessary extra expenses forced upon the small land and home owners, the number of law suits that have accrued is astonishingly small. Explaining that our services were being rendered in the interest of all concerned, that our intention primarily was the saving of life, we gained the confidence and active co-operation of the populace.

During the past year family physicians have been allowed, under certain conditions, to be responsible for contagious diseases, delegating to them the authority to decide whether or not the houses shall be placarded. This has undoubtedly brought the DEPARTMENT into closer touch with the practitioners, and has caused them to more freely report their cases. During the past year the total number of cases reported, while markedly less than the previous year, does not sufficiently reflect the great amount of prophylactic work

done by the DEPARTMENT unless we consider this point: that, relative to the total number of cases occurring, the proportion reported was greater than ever before ; and considering the number of cases, the low mortality, especially of diphtheria, reflects great credit upon the prevention endeavors of the BOARD OF HEALTH.

The fourth subdivision of the work allotted to the Medical Inspector's Staff, consists of duties in connection with the occurrence of cases of infectious or contagious diseases among school children, or those who might be liable to spread contagion. The mode of operation is as follows : Each day as reports come in from different medical practitioners in the city, lists are sent out according to topographical subdivisions to the Medical Inspectors. A Medical Inspector at once visits the house in which a case has occurred, and obtains the name of the sick child, the school it attended (if any), the number of children in the house and the schools they attend. If the case has been reported by a physician the Medical Inspector does nothing further than has been outlined. Should, however, the child belong to a poor family, where proper care cannot be had, it becomes the Inspector's duty to attend the patient, or to see that proper medical aid, nursing, food and medicines are furnished. He then visits the principal of the school in which the child had been a pupil and leaves with him a printed card of notification as to the disease, the name of the suffering child and its address. On receiving such notification, the principal is required, on a card furnished for that purpose, to inform the contagious-disease clerk of the HEALTH DEPARTMENT, that he has been notified as to the condition in question. When the Division of Contagious Diseases receives from any physician a report of a contagious or infectious case, the clerk forwards to this physician's address a "reply" postal card. This when returned serves as notice that the case has terminated.

A postal card is then mailed to the principals of the schools, both public and parochial, in the vicinity of which the case had been found, informing them that the case has terminated, that the premises have been disinfected, and that all members of the family, including the school children, if any, are relieved from further restriction. These precautions are not only enforced when the disease has attacked a pupil or its family, but also when a case has been discovered in the vicinity or neighborhood of a school. If a case is found in a pupil, or in a family to which the pupil belonged, the school itself is visited and examined by a Medical Inspector who also looks into the health of the pupils in the room in which the sick child had last been enrolled, and inquires as to whether any other pupils have shown signs of illness. The general sanitary condition and surroundings of the school and of the house in which the patient lives are also given attention. Each Saturday morning, the Medical Inspectors meet the Chief Medical Inspector in the City Hall and submit reports to him of the entire sanitary work done during the week, which reports are summarized and forwarded to the ASSISTANT COMMISSIONER OF HEALTH.

One of the most valuable and important aims of a Municipal Health Department is prophylaxis. It is a well known adage that an ounce of prevention is worth a pound of cure, and I cannot think of any service ever rendered to the city by the DEPARTMENT OF HEALTH that has had such beneficial effect as the notices that have been given to the daily press warning the citizens of Chicago of the condition of the drinking water. It is a well-accepted fact in connection with disease etiology, that very many pathogenic micro-organisms can be transmitted by drinking water, and at times when the state of the lake water rendered it unfit for consumption, the alarm has been sounded and the people notified to take such steps as might be considered best to purify the water.

I need only mention the destruction of the contagion-soaked old smallpox hospital, which had long survived its usefulness, and the completion of the new Isolation Hospital, one of the most perfect of its kind in the world. Your retention of the good Sisters in charge of the Hospital was a recognition of the efficiency of their services, their heroism and faithfulness in the past, and a guarantee of the care which will be given to all patients sent to the institution.

In conclusion, I submit to you certain statistical information which appears in the appendices hereunto attached, and also append copies of circulars, letters of instruction, etc.

Very respectfully,

ERASMUS GARROTT, M. D.,

Chief Medical Inspector.

751 WASHINGTON BOULEVARD.

Antitoxin Treatment of Diphtheria: 1895-96.

PREFATORY NOTE AND TABLES BY THE ASSISTANT COMMISSIONER.

DURING the winter of 1894-95 the first attempt of the DEPARTMENT toward the production of diphtheria antitoxin was made by the City Bacteriologist, Dr. GEHRMANN. Proper facilities, however, were wanting, and although some antitoxic serum was obtained it was not of sufficient strength to be useful, and the difficulties met with during the attempt demonstrated that an outlay far beyond the resources of the DEPARTMENT would be necessary for the production of a safe and potent serum.

In August, 1895, the increasing deaths from diphtheria led the COMMISSIONER—who had been much impressed with the results of antitoxin treatment shown by the New York Health Department—to establish a number of antitoxin stations for the convenience of physicians who desired to use the serum and to secure bacterial diagnosis of their cases. By arrangement with the New York Department supplies of antitoxin from its own laboratory were made available at reduced prices and for charity cases without charge. By September 18, some 60 of these stations had been established and their locations and other information concerning them were repeatedly published in the daily press. It was not, however, until October 5 that the first vial of the serum was called for from a station and, meanwhile, the diphtheria deaths continued to increase rapidly, the disease assuming epidemic proportions and threatening to cause the closing of some of the public schools. Every available medical officer of the DEPARTMENT was assigned to duty as an antitoxin administrator, and before the close of October the demand for antitoxin for a short time exceeded the supply. The products

of Behring, Roux and Mulford were bought in open market to supplement the New York supply, and a successful appeal was made to the City Council for an emergency appropriation and authority to employ an additional staff of experts in intubation and antitoxin administration — the antitoxin stations at the same time being nearly doubled in number. The work of this staff is set forth in detail in the report of Dr. E. P. MURDOCK, one of the regular Medical Inspectors of the DEPARTMENT, who was early assigned exclusively to the treatment of diphtheria and charge of the Antitoxin Corps.

By the close of March, 1896, the epidemic was substantially at an end and the following summary and statistics were compiled by the ASSISTANT COMMISSIONER.

SUMMARY OF ANTITOXIN REPORTS.

| | |
|--|--------|
| Total number reported cases of diphtheria visited Oct. 5, 1895, to March 31, 1896..... | 2034 |
| Total number found to be diphtheria..... | 1771 |
| convalescent or not diphtheria..... | 178 |
| dead on visit | 85 |
| | — 2034 |
| Total number found to be diphtheria | 1771 |
| Total number treated with antitoxin | 1658 |
| refused antitoxin | 113 |
| | — 1771 |
| Total number bacterially verified as true diphtheria..... | 1468 |

Of these there were treated on—

| | Total. | Recovered. | Died. | Death rate per cent. |
|-----------------------------|--------|------------|-------|-------------------------|
| First day of disease..... | 106 | 106 | 0 | 0.00 |
| Second day of disease | 336 | 331 | 5 | 1.19 |
| Third day of disease..... | 660 | 642 | 18 | 2.72 |
| Fourth day of disease | 269 | 231 | 38 | 14.12 |
| Later than fourth day..... | 97 | 64 | 33 | 34.02 |
| Totals..... | 1468 | 1374 | 94 | 6.40 |

Percentage of recoveries in 1468 cases of true diphtheria treated with antitoxin, 93.

In addition to the foregoing there were 1423 individuals—children and other members of the families exposed, nurses and other attendants, inmates of orphan asylums and

The first tabulation of the individual reports of the antitoxin administrators was made for the period between October 5, 1895, and January 10, 1896, and is here reproduced in detail in order to afford a comparison between the earlier and later forms of report blanks. The forms adopted at the beginning of the diphtheria season of 1896—October 1—furnish the data from which are compiled the interesting tables on a subsequent page, showing the results of the antitoxin treatment with reference to ages as well as by day of treatment.

| | |
|--|------------|
| Total number of reported cases of diphtheria visited: | October 5, |
| 1895—January 10, 1896..... | 1221 |
| At request of attending physicians..... | 1169 |
| Charity cases (no physician in attendance)..... | 52 |
| | 1221 |
| Total number found convalescent on arrival..... | 63 |
| dead on arrival..... | 50 |
| All other cases..... | 1108 |
| | 1221 |
| Total number found suffering from diphtheria..... | 1108 |
| Total number treated with antitoxin..... | 1047 |
| in which antitoxin was not used..... | 61 |
| | 1108 |
| Total number treated with antitoxin | 1047 |
| Total number recovered under antitoxin treatment..... | 961 |
| died under antitoxin treatment..... | 86 |
| | 1047 |
| Death rate under antitoxin treatment 8.21 per cent. | |
| Total number in which antitoxin was not used..... | 61 |
| of these known to have died. | 32 |
| Death rate where antitoxin was not used, 52.46 per cent. | |

NOTE:—"Not used"—either because the case was hopeless when first seen, or because the administrator feared the result of its use—as, for example, in a late stage of the disease—or because the family or the attending physician changed attitude after calling on the DEPARTMENT and refused its use.

| | |
|---|--------|
| Total cases treated with antitoxin..... | 1047 |
| Total cases proved (bacterially) true diphtheria..... | 805 |
| not proved (bacterially) true diphtheria..... | 242 |
| | — 1047 |
| Total cases proved (bacterially) true diphtheria..... | 805 |
| Total recovered..... | 753 |
| died..... | 52 |
| | — 805 |
| Death rate, 6.46 per cent. | |
| Total cases not proved (bacterially) true diphtheria..... | 242 |
| Total recovered..... | 208 |
| died..... | 34 |
| | — 242 |
| Death rate, 14.05 per cent. | |

NOTE:—The excess of this death rate over that of the "bacterially" proved may be attributed to the fact that in the majority of these cases the DEPARTMENT was called on in the late stages of the disease, and when the clinical symptoms were conclusive. The great majority of these cases were seen and antitoxin administered later than the third day of the disease.

RESULTS OF ANTITOXIN TREATMENT IN 805 CASES OF TRUE DIPHTHERIA (BACTERIALLY VERIFIED):

| Treated on— | Total. | Recovered. | Died. | Death Rate per cent. |
|----------------------------|--------|------------|-------|-------------------------|
| First day of disease..... | 61 | 61 | 0 | 0.00 |
| Second day of disease..... | 187 | 184 | 3 | 1.60 |
| Third day of disease..... | 372 | 362 | 10 | 2.68 |
| Fourth day of disease..... | 109 | 92 | 17 | 15.60 |
| Later than fourth day..... | 76 | 54 | 22 | 28.94 |
| | 805 | 753 | 52 | 6.46 |

NOTE:—The "day of disease" when antitoxin treatment was begun is only approximately correct, as above stated. In many cases definite information could not be obtained and "day of disease" was reported by the administrator on his best judgment.

There were 2 deaths within 6 hours and 3 within 12 hours after first injections of antitoxin made on second day of disease. Total 5.

There were 2 deaths within 12 hours and 3 within 24 hours after first injections of antitoxin made on third day of the disease. Total 5.

There were 5 deaths within 6 hours, 2 within 12 hours and 12 within 24 hours after first injections made on fourth day of disease. Total 19.

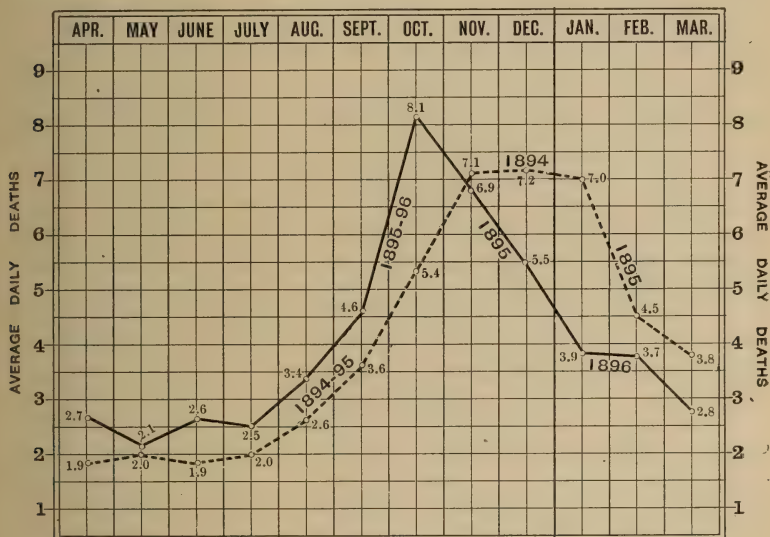
There were 8 deaths within 6 hours, 8 within 12 hours, 9 within 24 hours and 2 within 36 hours after first injections made later than fourth day of disease. Total 27.

Total all such deaths 56.

Total number of children and others exposed to the disease and treated with the protective dose of antitoxin..... 810

Total number of these who subsequently contracted diphtheria..... 4

The accompanying diagram, prepared by Dr. C. ST. CLAIR DRAKE, Assistant to the Registrar of Vital Statistics, shows the results of the antitoxin treatment between October, 1895, and April, 1896, contrasted with the corresponding period immediately before antitoxin was made available.



The diagram shows that the daily average of deaths was greater for every month of the period beginning April, 1895, than for the contrasted period beginning April, 1894, and so continued until antitoxin administration was generally adopted in November, 1895. Thenceforward the figures were reversed, and for the remaining months of November and December, 1894, and January, February and March, 1895, the total deaths were 774 as against 613 for the corresponding months ended March, 1896—a reduction of more than 20 per cent.

It further shows that the maximum mortality in 1895 was reached in October, during which month the deaths averaged 8.1 per day. In November they were 6.9; in December 5.5; and in January, 1896, they were 3.9 per day. For the

corresponding previous period the daily averages were as follows: October (1894), 5.4; November, 7.1; December, 7.2; and January (1895), 7.0. The decline from the maximum mortality in October, 1895, to January, 1896, was 49.1 per cent; that from the maximum mortality in December, 1894, to January, 1895, was less than 2 per cent. The average decline from the maximum mortality of each year to each following January during the preceding ten years—1885-1894—was 16.8 per cent, or only about one-third the decline during the period of antitoxin administration.

Between April 1 and December 31, 1896, the DEPARTMENT physicians visited 947 cases of reported diphtheria, of which number 665 were verified, and 644 were treated with antitoxin; of those treated with antitoxin 599 recovered, 40 died and 5 remained under treatment at the close of the year. Among those treated there were 72 intubations, with 6 deaths. During the same period 593 exposed individuals were treated with immunizing doses, and 5 of these were subsequently attacked with diphtheria, but all recovered.

The following tables cover the period between October 1 and December 31, 1896:

I.—SUMMARY OF THE WORK OF THE DIPHTHERIA ANTITOXIN CORPS
OF THE CHICAGO HEALTH DEPARTMENT:

OCTOBER 1—DECEMBER 31, 1896.

| | |
|---|-----|
| Number of cases visited..... | 677 |
| bacterially verified as true diphtheria..... | 475 |
| treated with antitoxin..... | 460 |
| recovered..... | 425 |
| died..... | 30 |
| remaining under treatment..... | 5 |
| treated with immunizing dose of antitoxin..... | 424 |
| of these subsequently attacked with diphtheria..... | 4 |
| of cases intubated..... | 55 |
| of intubated cases recovered..... | 47 |

Exclusive of 5 cases remaining under treatment at the end of December, the mortality rate was 6.6 per cent. of bacterially verified diphtheria—425 recoveries, 30 deaths.

II.—RESULTS OF ANTITOXIN TREATMENT IN BACTERIALLY VERIFIED DIPHTHERIA.

| DAY OF DISEASE FIRST TREATED. | TOTALS BY AGES. | | | | RECOVERED BY AGES. | | | | DIED BY AGES. | | | |
|--|--------------------|------------------|-------------------|-------------------|-----------------------|------------------|-------------------|-------------------|------------------|------------------|-------------------|-------------------|
| | Under 1 Year. | 1 to 5 Years. | 5 to 10 Years. | Over 10 Years. | Under 1 Year. | 1 to 5 Years. | 5 to 10 Years. | Over 10 Years. | Under 1 Year. | 1 to 5 Years. | 5 to 10 Years. | Over 10 Years. |
| First | 6 | 30 | 14 | 12 | 6 | 28 | 14 | 11 | ..... | ..... | ..... | ..... |
| Second | 17 | 47 | 30 | 25 | 16 | 46 | 30 | 25 | 1 | ..... | ..... | ..... |
| Third | 13 | 56 | 38 | 24 | 13 | 54 | 35 | 23 | ..... | 2 | 2 | 1 |
| Fourth | 14 | 34 | 18 | 15 | 14 | 31 | 16 | 12 | ..... | 3 | 2 | 3 |
| Later | 6 | 22 | 25 | 14 | 3 | 18 | 20 | 10 | 3 | 4 | 5 | 4 |
| Totals | 56 | 189 | 125 | 90 | 52 | 177 | 115 | 81 | 4 | 9 | 9 | 8 |

Still under treatment, December 31, 1896 : two between 1 and 5 years and one over 10 years, treated on first day of disease; one between 1 and 5 years, treated on second day of disease; one between 5 and 10 years, treated on third day of disease.

III.—DEATHS AND DEATH RATES BY DAY OF TREATMENT AND BY AGES.

a. BY DAY OF TREATMENT.

| TREATMENT BEGUN ON— | CASES. | RECOV- ERIES. | DEATHS. | DEATH RATE PER CENT. |
|-----------------------------|--------|------------------|---------|----------------------------|
| First day of disease | 59 | 59 | 0 | 0.00 |
| Second day of disease | 118 | 117 | 1 | 0.84 |
| Third day of disease | 130 | 125 | 5 | 3.85 |
| Fourth day of disease | 81 | 73 | 8 | 9.87 |
| Later than fourth day | 67 | 51 | 16 | 23.88 |
| Totals | 455 | 425 | 30 | 6.59 |

b. BY AGES.

| CASES. | TOTALS. | RECOV- ERIES. | DEATHS. | DEATH RATE PER CENT. |
|------------------------------|---------|------------------|---------|----------------------------|
| Under 1 year of age | 56 | 52 | 4 | 7.14 |
| Between 1 and 5 years | 186 | 177 | 9 | 4.83 |
| Between 5 and 10 years | 124 | 115 | 9 | 7.25 |
| Over 10 years | 89 | 81 | 8 | 8.98 |
| Totals | 455 | 425 | 30 | 6.59 |

Up to the close of 1896, from the beginning of the antitoxin treatment as an organized branch of the DEPARTMENT work, October 5, 1895, there had been appropriated by the City Council and expended through the Antitoxin Corps for services and material in the treatment and prevention of diphtheria, a total of \$23 495.22.

Following are the gross figures of the work performed and the results :

| | |
|--|------|
| Total number of cases of reported diphtheria visited by the DEPARTMENT physicians..... | 2981 |
| Total number found to be diphtheria..... | 2436 |
| Total number in which antitoxin was allowed to be used | 2302 |
| Total number of antitoxin-treated recovered..... | 2146 |
| Total number of antitoxin-treated died..... | 151 |
| Death rate under antitoxin treatment, 6.56 per cent. | |

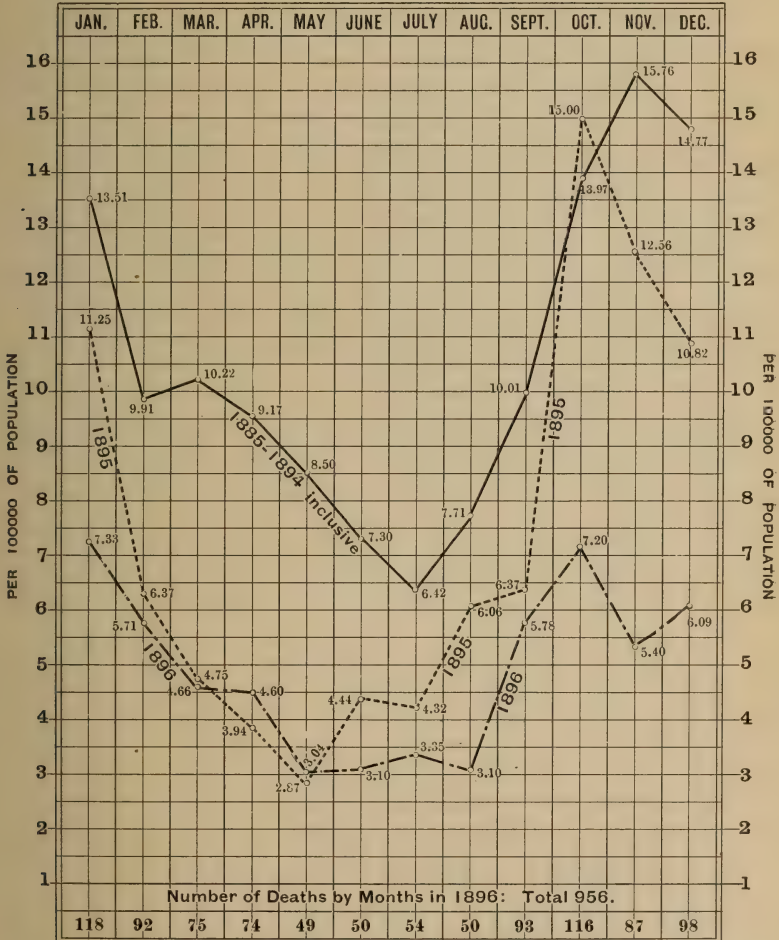
Experience shows that the average mortality of diphtheria previous to the introduction of antitoxin was about 35 per cent. of all cases—30 per cent. in hospitals and 40 per cent. in private practice. At this rate (35 per cent.) there would have been 806 deaths among the 2302 cases had not antitoxin been used.

| | |
|---|------|
| Total number of exposed persons immunized..... | 2016 |
| Total number of these subsequently attacked with diphtheria | 14 |

Experience shows that fully one-half of those exposed, under the conditions which obtained in these 2016 cases, would have been attacked with diphtheria; and of those attacked 352, or 35 per cent. of the 1008, would have died if not treated with the antitoxin. Only 14 out of the 2016 exposed were attacked and none died.

It is well within bounds to claim a direct saving of at least 1200 lives through the introduction and use of antitoxin in diphtheria by the Chicago HEALTH DEPARTMENT during the last fifteen months

Dr. DRAKE'S second diagram shows in a still more striking manner, and for a period covering twelve years—1885 to 1896 inclusive—the great change wrought by antitoxin in the incidence and mortality of diphtheria.



The continuous line and figures show the average number of deaths, by months, per 100 000 of the mean population living between 1885 and 1894. During this period the average annual rate was 10.51 per 100 000.

The dash-and-dot-line and figures show the number of deaths, by months, per 100 000 of the mean population (1 619 226) of 1896. The total diphtheria deaths during the year numbered 956, giving a rate of 5.9 per 100 000 of population, as against the rate of 10.51 during the ten years of the pre-antitoxin treatment.

The remaining line and figures in the diagram show the monthly rate per 100 000 for the year 1895—a transition year, during only a part of which was antitoxin used and therefore not capable of comparison.

It is apparent that if the ten-year pre-antitoxin rate, 10.51 per 100 000 of population, had prevailed during 1896, there would have been a total of 1706 instead of the 956 deaths from diphtheria which occurred last year. This saving of 750 lives of those actually attacked with diphtheria in 1896—a reduction of nearly 44 per cent. of the usual diphtheria mortality—is attributable to no other cause than the use of antitoxin.

It is doubtful if the city ever expended \$23 495.22 more profitably for human health and life.

WORK OF THE AUXILIARY MEDICAL CORPS
(ANTITOXIN STAFF) OF THE HEALTH
DEPARTMENT: 1895-96.

BY E. P. MURDOCK, M. D., MEDICAL INSPECTOR AND
CHIEF OF THE ANTITOXIN STAFF.

IN submitting the report of the Auxiliary Medical Corps of the CHICAGO HEALTH DEPARTMENT for the treatment and prevention of diphtheria, I beg to refer in brief to the origin and progress of the work as it became a part of the system for a more complete supervision of contagious and preventable diseases in our city.

The rapid increase in the number of cases of diphtheria reported during August and September, 1895, gave warning of the approach of a serious epidemic of the disease. At the same time, the demand upon the part of the medical profession for assistance through the DEPARTMENT OF HEALTH to prevent the rapid spread of the contagion in the thickly-crowded districts led the ASSISTANT HEALTH COMMISSIONER to request me to answer the calls of physicians and render such assistance as in my judgment would contribute most toward staying the ravages of this disease.

I began my work by responding to the requests for the administration of antitoxin, the verification of diagnoses by bacterial examination and the relief of laryngeal stenosis by intubation. In connection with this work I also investigated the causes which led to the rapid spread of the contagion, gave directions for isolation, made notes of environment, immunized children exposed, co-operated with the attending physicians in all respects to restore patients suffering from diphtheria and to protect the public from further exposure.

Careful observations were made to determine the sources of infection and the agencies which led to the spread of the contagion and the following conclusions were submitted :

1st. Failure to isolate patients and prevent unrestricted visiting and open communication with friendly neighbors, and even the public schools.

2d. Failure to destroy or properly disinfect clothing and other material which had been in contact with the patient, and the lack of proper fumigation and cleansing of premises.

3d. The public character of funerals to the extent of exposing the body of a child dead from diphtheria to public visitation of friends and neighbors—they not only viewing the body themselves, but permitting their children to come in immediate contact and even kiss the dead child's face. Nor was this all, but bodies of children who had died from malignant diphtheria were taken into churches for public funeral services and their little playmates acted as pall-bearers without even an effort to cleanse or protect the mouth or nostrils of the corpse.

4th. The unsanitary condition of water-closets, especially in districts where old outside vaults are still in use without wash-outs or sewer connections.

5th. Failure to report the so-called "mild cases" which were exposed to indiscriminate contact with their little friends from which many malignant cases developed.

From these causes I traced over eighty cases of diphtheria with twenty deaths, all of which might have been avoided by proper precautions.

A few notes from my daily register may be of special interest:

At the request of a physician I attended a funeral of a child known to have died with malignant diphtheria, in the southwest portion of the city. Services in the

chapel; over two hundred persons present, eight little girls acting as pall-bearers. Twenty others marched in procession from the house to the chapel where the corpse was carried by the children; all passed around the open coffin and viewed the remains and many kissed the corpse. I secured the names and addresses of fifteen children present, and traced nine cases of diphtheria from this source with four deaths. Recommended funeral inspection.

Was called into the 17th Ward to treat a case of diphtheria by Dr. M. C. MORAN; found seven people living in two small rooms, three children sick with diphtheria in one bed, one died while I was there; on that same bed were two large bunches of bananas, still green but ripening, for the purpose of being peddled upon the streets and bought by unsuspecting people.

Was called in the night to see a family in a basement on Austin avenue. Five children sick, one dead; nine visitors present, some of whom were women with their nursing babies in their arms. From this one source I traced thirteen cases of diphtheria with five deaths.

My attention was called by Dr. F. E. THORNTON to a "mild case" of diphtheria which had not been reported, being able to attend school and visit friends, but a culture proved the case to be one of diphtheria. From this case four other children in the same family and the mother and father were all taken down with diphtheria, but all being treated with antitoxin early, because of the report from the bacterial examination, all recovered.

Mrs. B. having lost her only child with diphtheria, used what she considered the ordinary means of cleansing her house (which looks to be scrupulously clean at all times). Soon afterward gave away the clothing belonging to the dead child. From this source I traced five cases of diphtheria and one death.

I visited a room in one of the public schools and noticed two children with flannel cloths around their necks who complained that they were not very well. The children were all writing a spelling lesson. After the exercise was finished and the papers and pencils were collected, I asked permission to take half a dozen pencils home with me, from which cultures were carefully made. From two of these pencils I obtained Klebs-Loeffler bacilli, and one of the Inspectors was called upon to treat the deskmate of one of these children for diphtheria a few days afterward.

The character of the epidemic, the variety of sources for the spread of the contagion and the demand on the part of the medical profession for assistance became so great that the COMMISSIONER applied for and obtained an appropriation for the appointment of an emergency staff for the purpose of perfecting an organized system to control the ravages of this disease.

A special appropriation having been secured for this emergency, the following physicians were appointed to enforce the necessary measures for the control of diphtheria: Drs. SAMUEL K. WALKER, WM. K. JAQUES, G. E. KRIEGER, MARTIN M. RITTER, ROSA ENGELMANN, HAMILTON H. FORLINE, H. H. LATIMER, W. A. MACFARLANE, R. W. HARDON, J. A. EGAN, FRANK S. CHURCHILL, J. W. WALKER, J. J. CLAUSEN, A. H. ROLER, J. C. BRYDGES, and the city was divided into districts with a physician placed in charge of each district, three of the number being detailed to supervise funerals and prevent as far as possible the spread of contagion from this source.

The members were called together and organized the "Auxiliary Medical Corps of the CHICAGO HEALTH DEPARTMENT," with Dr. E. P. MURDOCK as President and Dr. MARTIN M. RITTER as Secretary. Regular meetings were held to

hear reports of cases, to note the effects of antitoxin in the various complications of the disease, and to determine the best methods of procedure in diagnosis and treatment. They were instructed to obtain the facts about all cases of diphtheria in their respective districts, and to use all means in their power consistent with professional ethics, and under authority of law, to conserve the true interests of the public in the control of this disease. They were also instructed, wherever it was possible, to determine by bacterial examination the true character of the disease; to learn whether antitoxin had been used or not, and if so on what day of the disease, and the results; and at all times, so far as it lay in their power, to subserve the interests of the family physician while protecting the public health.

Incubators and culture tubes or boxes were furnished for bacterial examinations, and such other supplies as were necessary for the work. A system of rules was formulated for the isolation of patients and the care of sick rooms, which would justify the removal of diphtheria warning cards by the Medical Inspector when, in his judgment, all sources of the spread of the contagion were absolutely shut off, and a communication was addressed to the medical profession and the public, setting forth these points, and asking their co-operation.

In this communication attention was directed to the fact that it was as yet an unsettled point as to where the duty of the family physician ended and the obligations of the HEALTH DEPARTMENT began, and as to what extent the DEPARTMENT could with propriety and justice to itself aid the practitioner in the control of contagious diseases and the protection of the public health, by systematic efforts to prevent the spread of the contagion, and thus secure the greatest benefits to the community with a minimum expense to the municipality. The efforts of the past had been confined to smallpox, and

these efforts have been of the greatest importance to the people. Hundreds of thousands of dollars have been appropriated without stint or question for the control of this dreaded disease. In fact, the treatment of smallpox and its prevention have been practically taken out of the hands of the general practitioner and placed under municipal authority. But diphtheria, which destroys more lives in a single year than smallpox has in a decade, had scarcely been noticed save by tacking a white card upon the door, and leaving the rest to a careless and indifferent public—the most objectionable, and at the same time the least efficient plan that could possibly have been adopted.

These two diseases and their treatment seemed to represent the extremes in municipal action, and hence the Corps agreed upon a middle course, the object of which was to enlist the active co-operation of the entire medical profession in the efforts of the HEALTH DEPARTMENT in such united action as that the greatest amount of good and systematic work should be accomplished with the least expense to the municipal authorities, and at the same time preserve the confidential relations which should always exist between the physician and his families. To this end it was suggested that sub-stations be established at convenient points in different parts of the city where bacterial examinations could be made and a diagnosis verified, thus aiding the busy practitioner in his work by access to a well-equipped laboratory, at the same time keeping the DEPARTMENT in touch with the profession and thus enabling it to be thoroughly conversant with the sanitary conditions of the city, while acquiring valuable data for its legitimate work of preventing the spread of contagion. This we think should be the proper course for the DEPARTMENT to pursue, as it will secure to the authorities the results desired through the physicians in

private practice with the least expense to the city and the mutual benefit of all concerned.

In this connection I venture to suggest that the necessity of bacterial examinations is so great both to the DEPARTMENT and to the physician that the importance of sub-stations cannot be overestimated, where examinations can be made by an Inspector who can have the benefits of the culture and clinical observations and consultations with the attending physician in the shortest possible time after the first visit to the patient. At the same time the general practitioner must be impressed with the importance of being in close touch with the Laboratory that he may be familiar with the supplies which he may obtain there for his own use, to aid him in his own work. These outfits are obtainable from the Laboratory direct or through antitoxin stations throughout the city.

The outfits for making cultures from suspected cases are supplied gratis to physicians and are obtainable from the ninety-six antitoxin stations of the DEPARTMENT located throughout the city.

These outfits, the method of their preparation, etc., are fully described in the paper entitled "Bacteriologic Methods in the Diagnosis of Diphtheria," by ADOLPH GEHRMANN, M.D., Director Municipal Laboratory.

If the diagnosis can be established by clinical examination the treatment should be promptly administered without waiting to determine whether the bacillus of diphtheria is present or not. But when there is a doubt as to the nature of the infection it might be worse than useless to subject the little patient to an injection of diphtheritic antitoxin when streptococcus serum or some other treatment is required, because we constantly keep in mind that it is the Klebs-Loeffler infection and its result that we are counteracting by the use of diphtheria antitoxin; and we have at all times

required the verification of diagnoses by bacterial examination and have based our statistics as to the result of treatment entirely upon cases where such examinations have clearly established the nature of the infection.

The serum treatment has been relied upon by this DEPARTMENT in all forms of diphtheria where the serum could be procured — both diphtheria antitoxin and streptococcus serum ; in many cases both being used in the same case where the examination demonstrated mixed infection.

The peculiar characteristics of these various forms of angina or diphtheria are set forth in detail in the report of Dr. W. K. JAKES, who has been in charge of the sub-laboratory on Cottage Grove avenue.

The place selected for the injection is usually just above the crest of the ilium, as this affords the most suitable locality for absorption of the serum. The skin is thoroughly cleansed and anæsthetized by a local application to prevent shock so often produced by the introduction of a hypodermic needle, because most alarming symptoms often follow the slightest scratch on the skin in persons who are frightened and at the same time have cardiac weakness. Yet we have seen fewer cases of syncope from the use of antitoxin than from the slight scratches for vaccination, although we have been forcibly reminded that slight disturbances may turn the scale in a diphtheritic patient.

The following illustrative notes are taken from the case books of some of the Inspectors:

Dr. FRANK X. WALLS was called to administer antitoxin to a child four years old, but on arrival the mother concluded that the child was so much better that the treatment would not be required ; while discussing the importance of protecting the other members from infection the sick child suddenly

screamed, fainted and died. If antitoxin had been administered in this case the remedy would undoubtedly have been accredited as the cause of death.

Dr. M. M. RITTER visited a family where three children were suffering with diphtheria. After a careful examination he concluded to administer antitoxin to all, but while treating one child the smaller one, who had been the first to develop the disease, suddenly sank into the mother's arms and died.

In my own visits I encountered a case almost an exact parallel to that of Dr. RITTER. Upon two occasions, when the injections of ten cubic centimeters were given in too great haste, without previously preparing the patient for the operation, I have witnessed alarming syncope, but in both cases the patients were revived and made good recovery, thus warning me that careless or unskillful hands may produce serious or even fatal results and thereby convey the idea that the remedy was the cause.

The dosage is determined chiefly by the extent of the infection rather than the size or age of the patient, and the manner and frequency of its use by the character and vigor of the patient. This, however, we have clearly shown: that it is important to give sufficient antitoxin not only to counteract the toxin already absorbed, but also to counteract the constantly increasing toxin in the system. And as it is antitoxin rather than serum that is required the higher powers are always preferred when there has been much advance in the disease or in laryngeal stenosis, in which cases 2000 units are always preferred at the first injection. Only where there is marked anemia with patients treated in the very earliest stages of the invasion do we use small doses to be repeated at short intervals. The action of the antitoxin being cumulative and in direct line with the normal action of

nature's effort to conquer the disease, it is found to be most desirable to use the largest necessary dose at once, or as soon as the diagnosis is fully established. The other treatment consists in simple remedies to sustain the heart's action and promote elimination, always keeping in mind that the presence of albuminuria is a positive contraindication for the use of alcoholic stimulants—in fact, we have no faith in the efficacy of alcohol in diphtheria.

The marked reduction in the death rate which has been variously reported wherever antitoxin has been used, showing a decrease in the mortality rate from 35 to 50 per cent. before its use to 4 to 7 per cent. following the timely use of antitoxin, has been fully justified by the observations of the Inspectors in this DEPARTMENT.

Nor can we report any unfavorable conditions to counteract or militate against these most excellent results.

There has been some local pain at the seat of the injection, some swelling and redness,—urticaria following from three to ten days after its use, but in no case were the sequelæ one-half so painful or so formidable as the mildest sequences following successful vaccination. There have been a few cases of albuminuria a few days after the use of immunizing doses of antitoxin, but these have been very transitory and soon pass away with complete recovery—never any serious consequences; while, in all cases of marked albuminuria resulting from the toxin of diphtheria, the renal symptoms rapidly subside after the administration of antitoxin of the proper strength and quantity. Even this result has not been observed since we have been using the higher powers of antitoxin with smaller amounts of serum. Not only that, but careful experimentation has convinced us that albuminuria came from the large use of the serum and not from the antitoxin, and the same may be said of other sequelæ. The effect

upon the diphtheritic infection is most remarkable ; at once arresting the disease if used in the early stages and properly administered and giving excellent results even when used after the fourth day, though, this cannot be so confidently expected as when the antitoxin is used early.

To appreciate the importance of even greater care in recognizing the causes and enforcing the means of preventing the spread of diphtheria than either in smallpox or Asiatic cholera, it only requires a glance at the mortality list of more than twelve thousand children who have fallen victims to this contagion in our own city within the last decade. Well might it be characterized as a "slaughter of the innocents."

In tracing the rise and subsidence of the various epidemics of diphtheria from the public records, we are impressed with three points as factors in the rapid spread of the disease :

- 1st. The season of the year.
- 2d. Local conditions in certain parts of the city.
- 3d. The character of the population.

1st. While diphtheria is usually present in our city during the entire year, the rapid increase in the number of cases reported becomes marked in September, the increase continuing throughout October, November and December, beginning to change in character in January and thence subsiding until it reaches a minimum in the month of June, thus pointing out that meteorologic changes are prominent factors in determining the predisposing causes, not only for the spread of the disease but also for the character of the infection, thereby indicating to us some of the steps necessary for its prevention. However, it should be noted that other factors than meteorologic changes should be taken into consideration with the changes of the seasons : (a) diminished exposure to sunlight by indoor occupations, (b) closer

communion of children by the opening of schools, (c) diminished aeration by closing up of houses, and other conditions due to social relations in city life, all tending to diminish vitality and increase the virulence of the infecting germ.

2d. A careful study of a city map which has been marked from day to day to indicate the locality of reported cases of diphtheria, shows that those localities where the population is crowded into close tenements, with poor ventilation, little or no sunlight, defective drainage, outside vaults without proper sewer connections used in common by several families, and dilapidated buildings without modern conveniences, give the largest number of cases of the disease, for reasons which are obvious from the very nature of the infecting germ.

The plain unmistakable nature of the causes for the propagation and spread of the disease in these places, at once suggests the duty of the sanitary officers for the protection of the public.

3d. In a cosmopolitan city like Chicago, where there is a marked tendency on the part of the foreign population to colonize, it is a notable fact that those sections where the population is from the provinces in which diphtheria is almost unknown, as many of the Mediterranean States, there is such a decided indifference to the laws of isolation and infection, that a single case in such a locality may become a center from which, through visiting the schools, or through transactions of fakirs and other indiscriminate commingling, a veritable epidemic may spring.

The following precautions against the spread of diphtheria are recommended :

1st. As soon as the inflamed throat has been recognized to be diphtheria, either by inspection or by bacterial examination, the patient should be placed in a room which can be

isolated from all other parts of the house, and where the best sanitary surroundings and the most sunlight can be obtained.

2d. All unnecessary articles, including carpets, rugs, curtains, books, upholstered furniture and other things which cannot be readily disinfected, should be removed and the room itself thoroughly cleansed with an antiseptic solution. Whatever is used in the room, whether bed or couch, should be covered with washable goods only; and the nurse, if a professional, should wear the regulation uniform; if otherwise, she should select only such garments as can be easily and readily washed.

3d. None but the regular attendant—nurse or mother—and the attending physician should be permitted to enter the room, and they should cleanse their hands carefully on leaving with the antiseptic solution always kept in readiness at the door. The door knob should be kept constantly covered with antiseptic gauze frequently changed, or the doorway hung with a sheet kept constantly moistened with euthymol or other antiseptic solution.

4th. All articles of food passed into the room and not consumed, should be destroyed by fire, or thoroughly disinfected in the waste vessel by being immersed in a 1-1000 solution of bichloride of mercury before being taken from the room, and all dishes should be washed and disinfected before being removed.

5th. The simplest method of disinfecting is with boiling water, the article being kept boiling in the water at least half an hour, or in conjunction with this a solution of 1-2000 bichloride of mercury. This can be easily prepared by procuring the bichloride in half drachm powders, carefully labeled, to be dissolved in one gallon of water; or by using the regular antiseptic tablets, kept by druggists with full directions for using.

6th. All cloths, towels, napkins or handkerchiefs used to cleanse the mouth or nostrils, or to receive discharges from the body, if not burned, should be thoroughly boiled or immersed in bichloride solution and afterward washed and ironed, and vessels used to receive discharges should contain the same solution, that the diphtheritic germ shall be destroyed before being taken from the room.

7th. When the sickness has ended, the room should be cleansed as follows: (a) Wash all floors and woodwork with soap and water and then with the bichloride solution; (b) re-paper or calcimine the walls and expose to sunlight and fresh air; (c) treat all articles of furniture in the room with the bichloride solution, and place all washable clothing, linen, etc., in a sheet or pillow-case and immerse in the solution above mentioned, to be washed and ironed afterward, except where clothes have been used which can be readily destroyed, and these should be burned.

On application to the DEPARTMENT experienced fumigators are always sent to the residence and the premises thoroughly fumigated with burning sulphur.

601 WASHINGTON BOULEVARD.

THE ANGINAS OF 1896.

BY W. K. JAKUES, M. D., IN CHARGE SUB-LABORATORY FOR THE
BACTERIAL DIAGNOSIS OF DIPHTHERIA.*

WITH all the light that has recently been thrown upon the subject of diphtheria there is still much to be learned concerning it. The germ or germs that are the chief causative factors in producing this disease are most sensitive to environment—by which is meant all the conditions which influence the life of the germ as well as that of the patient who furnishes the soil for invasion.

Environment is continually changing. No two consecutive days have the same amount of sunshine, heat or moisture. Each season brings conditions which have their influence on the germs of the membranous anginas. With a knowledge of these facts, it is readily comprehensible why the anginas of one year or of one season should differ from those of another. If the conditions are favorable to the virulence of a certain germ, it will prove the causative factor of the anginas of that year; then subsiding into a secondary position with new conditions which favor the virulence of another germ.

All anginas manifesting membrane should properly be described as diphtheria since its derivation is from the Greek word meaning membrane. However, since the Klebs-Loeffler bacillus has been found to be the chief cause of mortality in anginas, only those cases where it is present are usually called diphtheria.

It is important to know if a child has diphtheria; it is equally as important to know what germ has caused the lesion. This being determined, the disease may be accurately described by prefixing a part of the name of the germ to the word diphtheria. This has been most satisfactory in the practice of the writer.

* No. 4300 Cottage Grove Avenue.

The bacteriology of the season of 1896 has presented many interesting differences from those of last year. At that time nearly seventy-five per cent. of all inflammations, including those causing stenosis of the larynx, were due to the Klebs-Loeffler bacilli. At the close of this year it is some member of the streptococci family that most often causes the invasion.

Following its invasion each germ has a definite train of clinical symptoms characteristic of itself, and were it not for the fact that there are so many mixed infections, there would be little difficulty in making a diagnosis without the microscope. But it is seldom the case that a culture reveals only one germ; others are nearly always present, it may be as accessories in a minor degree to the one germ causing the lesion. In every mouth there are a number of pathogenic germs which are impotent except when favorable conditions are presented for multiplication. If constitutional resistance becomes weakened toward any one of the germs present that one may become the exciting cause of inflammation.

This fact must be kept in mind when examining cultures microscopically, namely, to determine the invading germ and treat the case accordingly. The malignancy of a germ usually determines the rapidity of its multiplication. When a germ acquires this malignancy, it is probably because the patient's antitoxic power is reduced. For instance: The case of a child was diagnosed as Klebs-Loeffler diphtheria and antitoxin administered followed by typical reaction and recovery. Three weeks later a second inflammation occurred, culture showing mixed infection with Klebs-Loeffler bacilli present. Antitoxin was again injected with no reaction. The case followed the usual course of a streptococcic angina. The patient was already antitoxinized against the K.-L. bacilli, and although the germ was present, it had but little influence in the inflammation.

In laryngeal inflammations the staphylococcus causes simple spasmodic laryngitis; the streptococcus a stenosis of long duration sometimes requiring reintubation or the substitution of tracheotomy. If the Klebs-Loeffler bacillus causes the stenosis, it is possible to be as positive of the action of antitoxin as of morphine; while the ratio of mortality becomes fifteen to twenty per cent. instead of eighty to ninety per cent.

The accompanying tables of the clinical symptoms of the diphtheritic diseases, during the first, second and third 36-hour periods, are not presumed to be perfect, as they are compiled from a limited number of years' experience; but it is hoped they will form a substantial basis for further observation.

CLINICAL SYMPTOMS.

| DIPHTHERITIC DISEASES. | FIRST THIRTY-SIX HOURS. | | | | |
|--|----------------------------|---|-------------------------------|--------------------------------|--------------|
| | Temperature. | Local Condition. | Mental. | Urine. | Bowels. |
| I. STAPHYLO-DIPHTHERIA. (Called tonsillitis.) | Rises Rapidly to 103 105 | Swollen tonsils with membrane appearing around follicles. Headache. Pain. | Bright. | Diminished; Highly Colored. | Constipated. |
| II. STREPTO-DIPHTHERIA. (Called diphtheritic sore throat.) | Rises gradually to 101 103 | Invasion usually extended to large part of pharynx, posterior nares; membrane does not form rapidly; mucous membrane congested; covered with thick mucus. More pain than I. | Fretful and easily irritated. | Diminished and Highly Colored. | Constipated. |
| III. Klebs-Loeffler-Diphtheria. | 1. Mild. 99 to 101 | Redness with little or no swelling. Small amount of white membrane. Slight pain. | Normal. | | Constipated. |
| | 2. Moderate. 99 to 101 | Redness over more extended area than I. Any part of pharynx, larynx and trachea. | Normal. | Normal or less in quantity. | Constipated. |
| | 3. Malignant. 99 to 101 | Redness but not painful as strepto-infection. May be large or small amount of membrane in sight. | Dull. Careless. | Normal. | Constipated. |

CLINICAL SYMPTOMS—Continued.

| DIPHTHERITIC DISEASES. | | SECOND THIRTY-SIX HOURS. | | | | |
|---|------------------|---------------------------|---|-----------------------------|---------------------|--|
| | | Temperature. | Local Condition. | Mental. | Urine. | Bowels. |
| I. STAPHYLO-DIPHTHERIA. (Called tonsilitis.) | | Decreasing. 101 | Membrane white with definite edges. Less congestion. | Normal. | Normal. | Open. Responded to cathartics oreneina. |
| II. STREPTO-DIPHTHERIA. (Called diphtheritic sore throat.) | | Stationary. 102 103 | No improvement. Thin membrane. Tonsils will be covered if large. Much pain in swallowing. | Fretful. Loss of Sleep. | Dark Color. | Inactive. |
| Klebs-Loeffler-Diphtheria. | III. 1. Mild. | Stationary. 100 101 | No improvement unless antitoxin has been given. Membrane formed. | Normal. | Normal. | Active. |
| | 2. Moderate. | Stationary. 100 101 | No improvement. Membrane formed. Process stationary. | Normal. | Albumen? ? | Constipated. |
| | 3. Malignant. | Stationary. 100 101 | Membrane extending, glands may be involved. | Stupor. | Albumen. Less. | Normal or inactive. |
| DIPHTHERITIC DISEASES. | | THIRD THIRTY-SIX HOURS. | | | | |
| | | Temperature. | Local Condition. | Mental. | Urine. | Bowels. |
| I. STAPHYLO-DIPHTHERIA. (Called tonsilitis.) | | Normal. | Nearly normal. | Normal. | Normal. | Normal. |
| II. STREPTO-DIPHTHERIA. (Called diphtheritic sore throat.) | | Decreasing. | Beginning to improve if no abscess has formed. | Normal if no pus formation. | Normal. | Normal. |
| Klebs-Loeffler-Diphtheria. | III. 1. Mild. | Decreasing. | Improvement. Membrane disappearing. | | | |
| | 2. Moderate. | | May change to I or III (3). | | | |
| | 3. Malignant. | Stationary or Decreasing. | Membrane extending or glands enlarged. Bleeding at nose. Heart irregular. Fetor from membrane. | Stupor. Can be roused. | Albumen. Anuria. | Paralyzed. |

The staphylococcus is nearly always present in the fauces and is always present in slight inflammation of the tonsils. The crypts of enlarged tonsils contain them and a slight cold, causing congestion of the mucous membrane produces the necessary condition for disease. Occasionally the staphylococcus takes on considerable malignancy, the temperature rising to 104 and 105, and causing considerable constitutional disturbance. It is the invasion of this germ that results in simple spasmodic laryngitis. One of the chief characteristics is the short duration of the inflammation.

The streptococcus is the next germ in malignance and has a wide range of virulence, depending upon the conditions under which the invasion takes place. The point of invasion may be in the tonsils, but the entire tissues of the fauces are more likely to be involved, producing a dark angry appearance, with little or no membrane for 36 or 48 hours. The membrane is always small in proportion to the amount of inflammation. There is a tendency for the inflammation to spread back of the tonsils up into the posterior pharynx, invading the Eustachian tube, causing great difficulty in swallowing, also impairing the hearing. This is the most painful of all anginas, the most difficult to relieve and the slowest to recover. While the temperature in staphylococcus infection is high in the beginning and reaches a maximum in twelve or twenty-four hours, the temperature in streptococcus infection gradually increases to 102 and 103, remaining stationary for two or three days until influenced by treatment.

Symptoms are neither so apparent nor so alarming in the invasion of the Klebs-Loeffler bacillus. The germ seems to have an anesthetic action locally and act as a constitutional depressant. There may be little or no pain. The patient will be quiet, gradually going into a stupor. On examination of the fauces, membrane will be present either following

primary inflammation, or at first inspection. True Klebs-Loeffler diphtheria is the least painful of all anginas. The invasion usually takes place in the fauces, spreading to those parts of the mucous membrane which are susceptible, such as the nasal passages, the posterior fauces and the trachea.

During the past year the pseudo-bacilli has frequently appeared in the cultures. My observation leads me to think this germ is the Klebs-Loeffler bacillus changed in its morphology owing to the soil upon which it grows. My reasons are as follows :

First. Cases have resulted fatally with this bacilli as the invading germ, giving every clinical evidence that death was caused by ptomaine poisoning.

Second. The genuine Klebs-Loeffler diphtheria has been contracted directly from cases of pseudo-diphtheria.

Third. The morphological change between the pseudo and the Klebs-Loeffler bacilli is no greater than is seen by growing the K.-L. bacilli on blood serum and agar agar ; or the change which the K.-L. bacillus undergoes from the beginning to the end of a case of true diphtheria.

For these reasons, I advise the administration of anti-toxin in cases where the pseudo-bacilli appear, and in most of these cases typical reaction follows.

Temperature is considered an important indication of the gravity of a disease ; this rule must not strictly govern in anginas, as the highest temperature is caused by a germ of the least malignancy, namely, the staphylococcus. In the worst form of Klebs-Loeffler diphtheria, there may be not only an entire absence of abnormal temperature, but it is sometimes sub-normal.

When a child is attacked with diphtheria, there are several things we do not know : First, the susceptibility of the patient ; second, the virulence of the bacilli ; third, how large a surface is invaded ; and fourth, the eliminating

powers of the patient. The mortality of diphtheria, outside of laryngeal complications, is confined to the invasions produced by the Klebs-Loeffler bacilli.

This is due to the fact that in the multiplication of the bacilli and the progress of the disease, there is produced a toxin, or ptomaine, destructive in its nature, which causes death. In staphylo and strepto-diphtheria membrane is produced by the inflammatory process cutting off nutrition from the surface of the mucous membrane, thus causing necrosis. In Klebs-Loeffler diphtheria necrosis is caused by the ptomaine. In the kidneys it causes congestion of the tubules; in the blood, destruction of the corpuscles; in the nerves, degeneration; and in the vital centers, paralysis or degeneration. The absorption of this ptomaine may progress without clinical symptoms, so that only in the most malignant form will we have evidence of its presence by stupor, the flagging pulse and the presence of albumen in the urine. The absorption of the ptomaine depends, to a great degree, on the location of the membrane and the tissues involved, as well as the degree of virulence.

The ability of the nerve cells to withstand the action of the ptomaine depends upon the manner in which it is brought in contact with them. The sudden advent of a small amount of diphtheria toxin at the beginning of the disease is more likely to overcome the vital centers than a much greater amount which is introduced into the system gradually.

If the advent of the poison is sudden and in large quantities, the vital centers are paralyzed, and death results quickly. In smaller amounts, the poison institutes a process of degeneration which may not succeed in destroying the cell function for days or weeks.

The amount of poison it takes to produce death depends upon the size of the victim, the rapidity of ptomaine production and absorption, the powers of elimination, as well as the

susceptibility of the patient to the poison. The kidneys and bowels are the chief eliminators and should have careful attention from the first. Elimination has much to do with the time it takes to accumulate a fatal amount of the ptomaine.

While true Klebs-Loeffler diphtheria has not been so prevalent this year as last, it is of all the more importance that the distinguishing characteristics of the existing cases should be promptly recognized, for the reason that physicians who are not looking for it will not be prepared for it. The microscope furnishes the means for making a correct and comparatively early diagnosis, while antitoxin, properly used, furnishes a means of defense against a hitherto unconquerable foe.

4316 GREENWOOD AVENUE.

DIAGNOSIS OF DIPHTHERIA AND DISTRIBUTION OF ANTITOXIN.

By ADOLPH GEHRMANN, M. D., BACTERIOLOGIST AND DIRECTOR OF
THE MUNICIPAL LABORATORY.

THE bacteriologic diagnosis of diphtheria for physicians has been actively carried out during the past two years, and twenty-five hundred cultures have been received. During the last months of 1896 a number of the Medical Inspectors of the DEPARTMENT have become so expert that they could undertake many of these examinations themselves, and thus have relieved the DEPARTMENT Laboratory to a considerable extent. The method of preparing the outfits and making the examinations has been modified to some extent from that used when the diagnosis was first undertaken three years ago, and may be briefly summarized as follows :

For the success of the laboratory diagnosis it is necessary that there be a culture medium upon which the diphtheria bacillus will grow more rapidly than other bacteria, and some means for incubation as soon as possible after inoculation of the medium from the throat. No culture medium has yet superseded Loeffler's blood-serum mixture ; and when this is inoculated early in the disease, before any local treatment of the throat, a positive diagnosis can be made within twelve hours, the diagnosis itself depending upon a microscopic examination of the growth of the bacteria obtained.

The present form of outfit consists of a heavy paper envelope, within which is a blank for notes referring to the case and directions for making the culture ; a throat-swab of wood wrapped in paper, and a round aluminum box containing solidified blood-serum. The swabs are made from wooden

sticks, such as are sold for small flags; one end is sharpened and wrapped with absorbent cotton. The swab is wrapped in tissue paper, the ends of which, extending beyond the stick, are twisted sharply, keeping it closed. The swab and paper covers are sterilized by heating in a dry oven for one hour, at 165° C.

The box of serum is prepared as follows; The boxes used are one-fourth ounce, round ointment boxes, made from thin aluminum. We prefer those that have the edge of the box rolled over to the inside; this takes away the sharpness of the edge and makes the lid fit better. Before being filled with serum, the closed boxes are sterilized by dry heat, at 165° C., one hour.

The blood serum is obtained from beef blood that is drawn into a two or four-liter glass museum jar at the time the animal is killed. The jar of blood is immediately placed in an ice-chest and allowed to clot. In about half an hour the clot is loosened from the sides of the jar; this is done by shaking the jar or by inserting a clean glass rod or knife between the sides of the jar and the clot. Upon standing twenty-four to forty-eight hours in the ice-chest a quantity of clear serum may be expressed from the clot. The serum is drawn off by a syphon into a separatory funnel. To this is added sterile bouillon having the formula:

| | |
|-------------------|---------|
| Beef extract..... | 5 gram. |
| Peptone | 15 " |
| Salt | 5 " |
| Grape Sugar | 100 " |
| Water..... | 1000 " |

The constituents are mixed, made quite alkaline with sodium carbonate, boiled and filtered.

The addition of one-fourth part of bouillon to the serum gives two and one-half per cent. grape sugar in the mixture. The bouillon is not absolutely necessary; we have frequently

used serum without this addition with good results. The serum-and-bouillon mixture is filled into the aluminum boxes directly from the separatory funnel into which the serum was drawn. By first sterilizing the funnel and bouillon the exposure of the serum to contamination is very slight.

When filled, the boxes are placed on a tray in a water-jacketed oven. Solidification and sterilization of the serum mixture is accomplished at once. The heating is continued for three hours, allowing the temperature to rise to 100°C. This is repeated only once, and that on the following day. The serum may become too dry for use in from two to four weeks, but this is avoided by placing a rubber band around it. We have found that the lid of the tin box amply protects the culture medium from contamination.

When a culture is taken from a patient the swab is firmly rubbed against the suspicious spot. It is not necessary to remove a large quantity of mucus, and the swab must not come in contact with other parts of the mouth. The serum is inoculated by rubbing the swab thoroughly over the entire surface, and the swab is then at once destroyed by burning it. The serum should be firm enough not to break. An inoculation that is well spread produces a growth of individual colonies that may be examined separately. When inoculated the box is returned to the envelope and is ready for incubation. Incubation is begun as soon after inoculation of the serum as possible.

Any form of incubator may be used that will give a uniform temperature of 35° to 40° C. The messengers who collect the outfits from the stations place the outfit in an inner pocket, thus beginning the incubation at once. Where an incubator is not at hand, one may use Dr. JAKUES' method of pinning the envelope to the underclothing of the patient

or of the physician, thus using the heat of the body to maintain the temperature. The period of incubation required is from 9 to 15 hours.

Cases of true diphtheria show growth much sooner than do those of false or pseudo-diphtheria. When growth does not appear promptly, the examination is more likely to show absence of diphtheria bacilli. As soon as a growth is apparent it is to be examined microscopically.

Slides from the culture are prepared in two ways: (a) by removing a portion of the growth with a platinum inoculating rod, mixing it with a drop of distilled water on a slide and spreading evenly to the size of a cover glass; or (b) a clean cover glass may be dropped upon the surface of the serum, making an impression (klatsch) of the colonies. In this latter method there is the special advantage that the bacteria from different colonies do not get mixed, but remain in place together.

Any of the anilin stains may be used to stain the dried film of bacteria. We have lately used an aqueous stain of methylene violet with good results—alcoholic solution of methylene violet, 10 c. c., distilled water 100 c. c. In addition to this, the appearance of slides may be improved, by treating the film, stained with methylene violet, with a very dilute solution of vesuvin brown. Any extra stain is washed from the film, which is then dried and mounted with Canada balsam.

For microscopic examination a microscope stand with sub-stage condenser and one-twelfth oil immersion objective, giving an enlargement of seven to nine hundred diameters, is required. In general, upon placing the slide under the microscope, one of two pictures is seen—either the field is covered with bacilli showing peculiar characters, at once recognized as the diphtheria bacillus, or it is made up of

round or other cells plainly not diphtheria. As characters essential for the *Bacillus diphtheriae* we recognize :

a. A rapid-growing culture giving a large number of similar bacilli.

b. Bacilli from four to seven times the breadth in length, not regular in outline, many pointed at the ends, others pointed at one end and club-shaped at the other end; individual cells which do not stain evenly, but show irregular areas where the protoplasm has not absorbed the stain—the stain being more pronounced at the enlarged ends.

c. The arrangement of the bacilli as scattered individuals and side by side, close together; four or five may be thus placed; they do not occur in chains, but are often end to end in twos.

Bacteria from different cultures vary much in size, but this does not indicate any additional feature. The irregular staining of the diphtheria bacillus we find more frequent and pronounced in old cultures and in those where growth is not rapid.

We have dispensed with the diagnosis of the pseudo-diphtheria bacillus, because of the difficulty of drawing the line between it and the real Klebs-Loeffler bacillus by microscopic appearance. Animal experiments have also demonstrated that special characters of appearance do not indicate the pathogenic properties. The most difficult diagnosis from the slide is in cases of mixed infection, when, perhaps, a number of different appearing bacteria are present. In cases of false diphtheria various forms of staphylococcus, streptococcus and pneumonia bacteria are seen.

The failure to obtain the diphtheria bacillus in the first cultures made from a suspicious throat, while it was found in later cultures, has only occurred to us in cases where the diphtheria was in the larynx or trachea. In one instance

seven cultures from the throat were made with negative results, while the first examination after introducing the intubation tube showed the bacillus abundantly present. Three instances similar to this have been observed during the past winter. However, these are the only cases, outside of those where the result was vitiated by antiseptic gargles, in which the bacteriologic findings did not seem reliable.

The distribution of antitoxin has been constantly increasing, and has now extended to every part of the city. Four hundred and thirty-four drug stores are DEPARTMENT stations, and are supplied with antitoxin culture outfits and special circulars of information. The charity distribution has now been entirely delegated to the DEPARTMENT corps of Medical Inspectors. During 1895 antitoxin was distributed for charity upon receipt of a certified statement from a physician in charge of the case, conditioned upon the return of a culture outfit inoculated from the case, and the return of a clinical report at the completion of the case. It was soon found that this arrangement was unsatisfactory because antitoxin was first obtained gratis, and then the cultures and reports could only be secured by subsequent requests and correspondence, and it was even found necessary to send a messenger to the physician in order to obtain compliance with the regulation. The Medical Inspector at present is deputed to obtain and preserve this information in exchange for the privilege of visiting and treating the patient under the direction of the physician in charge.

SPECIAL MEDICO-SANITARY INSPECTIONS.

NOTE BY THE ASSISTANT COMMISSIONER.

DURING the month of May, 1896, six of the ten Medical Inspectors were assigned to special duty, under the supervision of the Chief Medical Inspector, as an experiment to determine what might be accomplished by inspecting premises in certain districts of the city notorious for bad sanitary conditions and high death rates from the preventable diseases.

Such visits were made on receipt of reports of death from certain specified diseases occurring in these districts, and the scope of inspection is indicated in the following "Instructions" and in the accompanying blank form of Report.

INSTRUCTIONS FOR THE REPORT OF INSPECTIONS TO BE
MADE BY THE MEDICAL INSPECTORS, CHICAGO
HEALTH DEPARTMENT.

Before beginning the inspection or making any inquiry the Inspector should explain clearly to the family the object of his visit, to-wit: That it is in order to learn whether the HEALTH DEPARTMENT can do anything to prevent further sickness or death in the household; that the disease which has caused the given death may often be avoided by correcting defects in the house and about the premises—defects which it is frequently the duty of the city or of the landlord to correct; and that certain precautions, which the Inspector will recommend, may prevent other members of the family from being attacked.

Proper consideration must be given to the customs and prejudices of certain elements of our mixed population and due care exercised to avoid exciting hostility or opposition. A kindly sympathetic tone and manner will usually accomplish this—especially with survivors still sorrowing for their dead.

Not less important than this is the scrupulous avoidance of any criticism of the treatment or action of the attending physician or midwife, under any circumstances, but especially in presence of the family. If there is any occasion for such criticism the facts should be included in the report, leaving it to the DEPARTMENT to deal with them. The address of the attendant is only furnished to enable the Inspector to confer with him (or her) if necessary to obtain information or to invite co-operation in preventive effort.

Having secured the confidence and good will of the family, proceed to obtain the necessary data for the first entries of the report, concerning which—In No. 1, in addition to total number of adults and children, if more than one family give name of head of each family.

Nos. 2, 3 and 4—inquire especially concerning the following diseases: Cholera Infantum, Cholera Morbus, Consumption, Diarrhea, Diphtheria (including Membranous Croup), Dysentery, Pneumonia, Puerperal Fever, Scarlet Fever, Smallpox, Typhoid Fever. In No. 2 state how many cases and what diseases are found at date of inspection—adults, children and sexes specified. In No. 3 the same for the past twelve months. In No. 4 specify the causes of any deaths during the past twelve months, giving ages and sexes.

No. 5, concerning vaccinal status, is self-explanatory and the information it will afford is highly important.

Following these numbered items the Inspector will note in writing—A. Any defect in ventilation and lighting of occupied rooms. B. Overcrowding—with details of the cubic space of rooms, number, ages and sexes of occupants, etc. C. Defects in basement, if any, as to dampness, filthiness, want of ventilation, light, etc. D. Drainage of house and premises. E. Condition of cesspool, sinks, drains and privy vault, if any. If privy vault, note whether connected with sewer or not. F. Any other obvious sanitary defects, with especial reference to the causation of the disease specified or its fatal determination.

If the death was from Typhoid Fever inquire and state whether contracted within the city limits or beyond; if within the city, what precautions were taken as to boiling drinking water, and give name and address of milkman and of iceman.

If the death was from Puerperal Fever ascertain, if possible, and report whether the attendant has had other cases during last sixty days, and give names and addresses of such cases.

In case of Diphtheria or Scarlet Fever ascertain and report fully what was done in the way of disinfection and, especially, whether other cases of these diseases have followed disinfection by the DEPARTMENT, giving dates, etc.

Furnish copies of the circulars on "Restriction and Prevention of Consumption," on "Hot Weather Care of Infants and Young Children," etc., in appropriate cases. Secure thorough disinfection of premises where death from Consumption has occurred.

Make such recommendation of action by the DEPARTMENT as you may deem proper.

[*Form of Report.*]

HEALTH DEPARTMENT: CITY OF CHICAGO.

Report of Inspection by Dr. _____ Medical Inspector,
of insanitary conditions probably connected with the death of _____
_____, at _____ Ward,
from _____, _____ 1896.
Attendant: _____
Date of Inspection _____ 1896.

INSTRUCTIONS FOR REPORT OF INSPECTIONS.)

1. { No. of Occupants { Adults, _____ White, _____
of Premises: { Children, _____ Colored, _____ Families, _____
Names of Heads of Families, _____
2. Sickness now, _____
3. Sickness past 12 months, _____
4. Deaths past 12 months, _____
5. Vaccinal Status, { Adults: { No. Vac. _____
{ " Re-Vac. _____
{ " Not Vac. _____
{ Had Smallpox, _____
{ Children: { No. Vac. _____
{ " Re-Vac. _____
{ " Not Vac. _____
{ Had Smallpox _____

(Items lettered A, B, C, etc.—in "Instructions"—to be filled in below.)
State definitely what advice has been given to the family and what action
should be taken by Department.

Report nuisances on adjoining premises, especially as to privy vaults.
This is especially important.

Keep the "Instructions" fresh in mind by an occasional re-reading.

During the month a total of 289 inspections were made of premises on which preventable-disease deaths had occurred, and the Inspectors found 84 cases of sickness existing at the time of inspections. These were chiefly diseases of the intestinal tract, including 7 of typhoid fever, 13 of infantile diarrhea and 36 of other acute inflammatory disorders; 12 cases of pulmonary consumption were found; 5 of puerperal fever; 2 of diphtheria; 1 of pneumonia; and 8 of marasmus, inanition, etc. Many of these cases were without medical attendance, on account of poverty, and of such the

Inspectors either took charge or provided other physicians from dispensaries and hospitals.

The most frequent insanitary condition met with was the unspeakable privy vault—foul, overflowing, unconnected with the sewer, without water-flush, etc. A total of 62 of the worst of these were abolished or the conditions materially improved; 42 sanitary water-closets were substituted for the offensive disease-breeding privy, and of the remainder the vaults were cleaned, woodwork repaired, sewer connections made or water-flush provided. The fact that it was necessary to resort to legal proceedings in only five (5) of these cases shows what might be accomplished by a system of continuous and competent inspection.

While the most important results were as above specified the correction of many other defects was secured—filthy and damp basements cleaned and drainage put in, defective plumbing and sewerage repaired, catch-basins supplied, city water introduced, dirty dark rooms cleaned, lighted and ventilated, yards cleaned and garbage boxes supplied or emptied where overflowing.

It is to be regretted that the limited force and resources of the DEPARTMENT precluded the continuance of this work on the lines first proposed, but the experiment was pushed sufficiently to demonstrate its value and the urgent necessity for its continuance.

THE THIRTY-THIRD WARD.

The great extent of territory to be covered and the time spent in reaching the cases scattered over all parts of the city, pointed to the desirability of concentrating effort in a compact area. The high death rate in the Thirty-third ward—the highest of any ward in the city during the first six months of the year—led to its selection for this purpose.

A death spot map of the ward, on which deaths from typhoid fever, acute intestinal, pulmonary consumption,

bronchitis and pneumonia, and "convulsions" are specially indicated, showed the great preponderance of mortality to be in a district bounded by Eighty-first street, Muskegon (or Reynolds) avenue, the Lake and the Calumet river (Ninety-fifth street). Five Medical Inspectors living nearest this district—the nearest, however, having to travel four miles, the farthest thirteen miles and the average fully seven miles to reach the field of their labors—were assigned to an inspection of the area. This was divided into five inspection districts, one for each Inspector, and the work of inspection was begun about the first of July.

Briefly summarized, these inspections showed a population of 17 437 persons, living in 2642 houses, on 853 acres—an average of 6.6 persons to the house and of 20 inhabitants to the acre. Since large spaces of this area are taken up by railroad tracks, switches, etc., the density of population is much greater than that indicated by these figures.

The site is low and flat, subject to overflow and impossible of drainage until treated as the site of the old city of Chicago has been—namely, by raising the grade to at least eight feet above city datum. Pools of stagnant water abound; open ditches clogged with silt, garbage and refuse; privy vaults and cesspools overflow the surrounding ground after every rainfall; decomposing animal and vegetable matter, from kitchen wastes to dead animals, litter yards, alleys, roadways and vacant lots; cleanly, healthful living is impossible.

The total population of the ward in the middle of 1896 was 41 485, according to the school census of that date. The total deaths in the ward during the first six months of the year were 317—an annual rate of 15.28 per one thousand. The population of the area inspected, as enumerated by the Inspectors, was 17 437, and the deaths in the area during the first six months were 202—an annual rate of 23.16 per

thousand. The death rate of the area was 51 per cent. greater than for the ward as a whole, and 143 per cent. greater than for the remainder of the ward outside this area.

The first relief secured was the cleaning out and opening up of the ditches and their general rectification, so as to secure the maximum efficiency of this primitive and wholly insufficient method of drainage. Some of these which had no outfall whatever were filled up and others constructed. The net result—according to reports from the Street Department, by which the work was done—was to lower the surface-water level an average of one foot, draining off many stagnant pools under and around houses and on vacant lots.

For the rest: A material improvement in garbage disposal was effected; a number of damp basements were vacated; several houses were ordered to be raised; defective plumbing was repaired; privy vaults cleaned or abandoned; yards, alleys and premises cleaned up; and, quite as important as anything else, much instruction was given by the Inspectors in the simple rules and precepts of decent living according to American standards.

If the work could be continued and extended, as it should be, there can be no question of reducing the death rate of this and similar areas in the city. But, with the compulsory withdrawal of the Inspectors for other and more pressing duties, the final result will be very similar to that of thrusting a stick in a pool of water: withdraw the stick and no impress remains.

THE NINETEENTH WARD.

At the regular meeting of the City Council, held November 30, 1896, the following order was adopted:

WHEREAS, During the months of August, September and October the spread of sickness and the death rate among the residents of the Nineteenth Ward, give frightful evidence of the existence of some local producing cause for such

sickness that it is the duty of the city authorities to investigate and remove ;

AND, ALSO, WHEREAS, It is apparent from the published tabulations of the Bureau of Vital Statistics that the death rate in the Nineteenth Ward during the recent month of October by far exceeded that of any ward in the city in numbers, taking the amount of population into account, and was only exceeded at all by the death rate in the most populous ward in the city, to-wit : The Thirtieth Ward, which has a population of 93 154, as against 48 280 in the Nineteenth Ward, or almost double ; yet the death rate in the Nineteenth Ward exceeded that in the former ward 0.45, and in actual number of deaths was startlingly disproportionate to all other wards in the city.

THEREFORE, In view of these facts, and of the menace to the public health all over the city that they contain, by the possible spread of the unhealthy condition existing in the Nineteenth Ward, and that the people of that ward of all conditions, taxpayers and non-taxpayers, may be freed from the anxiety and well-founded fear now existing among them of a death-dealing invasion of their homes ; therefore, be it

Ordered, By the City Council, that the DEPARTMENT OF HEALTH be and is hereby, and without delay, instructed and required to take the necessary steps to ascertain the cause of the exceptionally large amount of sickness now prevailing in the Nineteenth Ward ; and, having located and ascertained the cause, to take immediate steps for the repression and removal of such disease and death-producing conditions.

In response to the foregoing the subjoined report was prepared and transmitted to the Council by the COMMISSIONER :

DEPARTMENT OF HEALTH.

CITY OF CHICAGO, December 14, 1896.

HON. WILLIAM R. KERR,

Commissioner of Health, City of Chicago.

SIR:—In conformity with your instructions of the 1st inst., I have the honor to submit the following report prepared in reply to the order of the City Council at its meeting of November 30, instructing and requiring the DEPARTMENT

OF HEALTH "to take the necessary steps without delay to ascertain the cause of the exceptionally large amount of sickness now prevailing in the Nineteenth Ward; and, having located and ascertained the cause, to take immediate steps for the repression and removal of such disease and death-producing conditions."

As you are aware, the DEPARTMENT had already investigated and ascertained, prior to the passage of this order, the causes of the excessive sickness and death rate of the Nineteenth Ward, as well as of similar results from similar causes and conditions in the Sixth, Eighth, Fourteenth, Sixteenth, Seventeenth, Twenty-first, Twenty-sixth, Twenty-eighth and Thirty-third Wards, in each of which the records of the Bureau of Vital Statistics show an excess of death rate ranging from 6 to 26 per cent. higher than the average death rate of the entire city. These are the ten worst wards in the city as to preventable-disease sickness and mortality.

As compared with the ten best wards, regarded from this stand-point—namely, the Third, Fourth, Tenth, Eleventh, Thirteenth, Twenty-third, Twenty-fourth, Twenty-fifth, Thirty-second and Thirty-fourth—their death rates average 80 per cent. higher; while the difference between the most healthful ward, the Twenty-fourth, and the most unhealthful, the Thirty-third, is 364 per cent., or over three and a half times more in the Thirty-third Ward than in the Twenty-fourth per 1,000 of population. In the Nineteenth the proportion last month was even greater than this, being fully four to one, similarly compared. This, however, was exceptional. For the first ten months of the present year—January to October inclusive—both the Sixteenth and the Thirty-third Wards show higher aggregate death rates than the Nineteenth.

The conditions causing this excess of sickness and mortality, chiefly by zymotic or filth diseases, are substantially

similar in all these wards. In the order of their relative importance they are :

FIRST—The condition of streets and alleys.

SECOND—The character of the natural site.

THIRD—The character of the habitations.

FOURTH—The character of population.

Specifically as to the Nineteenth Ward :

FIRST—There are between seven and eight miles of streets and alleys which have never been paved at all, or from which every foot of paving has been worn away or carried off for fuel, or on which the paving is so worn, uneven and dilapidated that it can be cleaned neither with broom or shovel. From long occupancy of the territory the roadbeds of these thoroughfares are polluted to the last degree with trampled garbage, excreta and other vegetable and animal refuse of the vilest description. In dry weather this stuff is powdered by horses' hoofs and wagon wheels and is borne as dust in the atmosphere into every dwelling. In wet weather it soaks into the surrounding ground under and around houses and through the floors and walls of those below grade, as many of them are.

SECOND—Except in the west and southwest, west of Miller street, where the contour line rises to ten feet above datum, the original site was low, flat and sloping to the river. The natural level of the most densely populated area was five or six feet below city grade; much of this has not yet been filled up and houses are found four or five feet below the street level, the floors often resting directly on the earth, and the first-floor rooms damp, filth-sodden, dark and unventilated.

THIRD—Every character of disease-producing condition is to be found in the habitations occupied by the so-called "poorer classes" who make up a large part of the population of the ward. These are old, dilapidated or rotten,

damp, unventilated, badly lighted, badly drained, unprovided with proper facilities for disposal of excreta and without adequate or even necessary water supply.

FOURTH—The ward embraces, in the district east of Halsted street, the poorest and probably the densest population in the city. To quote from the volume of *Hull House Maps and Papers*, by residents of Hull House: “Rear tenements and alleys form the core of the district, and it is here that the densest crowds of the most wretched and destitute congregate. Little idea can be given of the filthy and rotten tenements, the dingy courts and tumble-down sheds, the foul stables and dilapidated outhouses, the broken sewer-pipes, the piles of garbage fairly alive with diseased odors, and of the numbers of children filling every nook, working and playing in every room, eating and sleeping in every windowsill, pouring in and out of every door, and seeming literally to pave every scrap of yard. It is customary for the lower floor of the rear houses to be used as a stable and outhouse, while the upper rooms serve entire families as a place for eating, sleeping, being born and dying. Where there are alleys the refuse and manure are sometimes removed; where there are none it would seem they accumulate undisturbed. In the front of each house stand garbage-receivers—wooden boxes repulsive to every sense, even when as clean as their office will permit; shocking to both mind and instinct when rotten, over-filled and broken, as they often are. Fruit-stands help to fill up the sordid streets and ice-cream carts drive a thriving trade. One hears little English spoken and the faces and manners met with are very foreign. People are noticeably under-sized and unhealthy, as well to the average observer as to the trained eye of the physician. Especially do the many workers in the tailoring trades look dwarfed and ill-fed; they walk with a peculiar stooping gait and their narrow chests and cramped hands are unmistakable

evidence of their calling. Tuberculosis prevails, especially in diseases of the lungs and intestines, and deformity is not unusual. The mortality among children is great and the many babies look starved and wan."

The most wretched elements of the population are not criminal or vicious ; they are the victims of their poverty ; overworked at poorly-paid occupations ; underfed on cheap and unfit food ; untrained in the simplest laws of cleanly, decent, healthy living. The conditions of their existence are a reproach to Christianity and to civilization ; a menace to the well-being of the community which allows such conditions to exist.

In general outline, which might be filled in and elaborated to a sickening and soul-depressing extent, these are the four principal conditions responsible for the excessive sickness and death rate of the Nineteenth Ward.

Further comment is hardly necessary for the present purpose ; yet it seems proper to say a word concerning the work of the DEPARTMENT in the ward during the last year and a half, in order to correct a somewhat general misapprehension, to-wit : That the attention of the DEPARTMENT has only recently, and because of this order, been given to the locality. In the midsummer of 1895 the high death rate of the Nineteenth Ward led to such investigation of its causes as the limited force at the disposal of the DEPARTMENT for such purpose made possible. In this work valuable assistance was rendered by the Hull House residents and by MRS. FLORENCE KELLY, State Factory Inspector. During the fall a force of volunteer sanitary inspectors, forty-two in number, chiefly students of social science in the University of Chicago, were furnished with sanitary police stars and began inspection work under the immediate direction of PROF. E. R. L. GOULD, of the Johns Hopkins University. Hundreds of nuisances were reported and abatement secured in a very

large proportion. But the work accomplished was "a drop in the bucket" compared with the magnitude of the necessities, and the volunteers soon abandoned their efforts. Such results as have since been obtained have been through the work of the wholly inadequate force of the regular sanitary inspectors of the DEPARTMENT.

The DEPARTMENT has ten men at its command for sanitary inspection, to cover 186 square miles of territory. The men are shifted from place to place and ward to ward, according to the exigencies and in response to the daily complaints of citizens. No continuous or systematic work can be done under the circumstances, nor can any inspector be held to accountability for unreported or uncorrected sanitary defects in any given ward.

When the annual appropriation ordinance was under consideration last February, an appeal was made for a sanitary inspector for each ward and for twenty-five physicians to be employed during July, August and September, in the tenement districts, where the children of the poor die off during these three months in a fifty per cent. excess of the average of the remaining nine months of the year. The financial condition of the city prevented compliance with the request and the slaughter of the innocents has continued substantially unchecked. It is true there has been some slight improvement as measured by the death rate. During the first eleven months of 1895, January to November inclusive, the total deaths in the Nineteenth Ward were 782. During the first eleven months of the present year the deaths were 739—a decrease of five and one-half per cent. It is only just, however, to attribute a large share of the improvement to the labors of the Hull House residents, and especially to MISS JANE ADDAMS and her assistant, MISS AMANDA JOHNSON, the efficient inspectors of the streets and alleys of the ward.

The Council order instructs and requires the DEPARTMENT OF HEALTH "to take immediate steps for the repression and removal of such disease and death-producing conditions" as it has located and ascertained to exist in the Nineteenth Ward.

It must be obvious from the facts set forth in this report that the DEPARTMENT is unable to comply with this instruction and requirement. With its present powers and resources it cannot compel the paving of streets and alleys nor the filling up of low, undrained disease-producing areas, but it should have the power to do so through the City Council, whenever it is demonstrated, as in the present instance, that a sanitary necessity exists affecting the public health.

Although buildings declared by the COMMISSIONER OF HEALTH to be unfit for human habitation may be ordered vacated, in practice it has been found next to impossible to secure such vacation without inflicting grievous hardship on the unfortunate poverty-stricken occupants. In only three out of many attempts during the year has the DEPARTMENT succeeded in vacating such unfit habitations and securing their destruction, and there are hundreds of unfit buildings in the Nineteenth Ward alone which should be condemned and destroyed, if there were any better shelters within the means of the present tenants.

Chicago is in urgent need of modern tenement houses, such as other municipalities have found it to their advantage to establish. They have proved to be the best agencies for reducing death rates, as well as for checking the growth of discontent. There is property in the Nineteenth Ward that the owners could put to no better or more useful purpose.

It would be a sanitary measure of the greatest value and of far-reaching influence if the city would exercise the right of expropriation for this purpose, so that public-spirited

citizens might form improved dwellings associations similar to those in New York, Boston, Philadelphia, and elsewhere, for the establishment of better and cheaper homes for wage-earners. These enterprises pay not only financially but in the elevation of the character of the tenants, the improvement of their habits and modes of life, their greater working efficiency resulting from better health and their higher value as citizens.

It is entirely feasible to remove and repress the disease-and-death-producing conditions of the Nineteenth Ward, as well as of other wards where like conditions exist. But it cannot be done by surface-skimming and scratching, or by the intermittent irruption of a handful of street and alley cleaners, or by the necessarily infrequent visits of one of the ten sanitary inspectors of the HEALTH DEPARTMENT.

The City Council itself must take the initiative, by enacting necessary legislation and by properly equipping the DEPARTMENT charged with the protection and improvement of the public health.

I am, Sir, very respectfully,

F. W. REILLY, M. D.,

Assistant Commissioner of Health.

Sundry abstracts of medical and sanitary officers' reports and letters, maps, photographs and detailed descriptions of typical insanitary conditions, localities and habitations, explanatory and corroborative of the general statements embraced in this communication, were also submitted. These embrace :

1. Report of Special Inspection of Certain Localities in the Nineteenth Ward, with Reference to Contagious Diseases. By E. P. MURDOCK, M. D., Medical Inspector.

2. Abstract of Reports of Special Medical Inspections of Nineteenth Ward. By Drs. E. P. MURDOCK and C. A. WADE, Medical Inspectors.

3. (a) Special Report on Plumbing and Drainage of Certain Houses in Nineteenth Ward. (b) Reports on Sanitary

Condition of Nineteenth Ward. (c) Summary Report of Work of Sanitary Inspectors in the Nineteenth Ward. By ANDREW YOUNG, Chief Sanitary Inspector.

4. Report of Special Sanitary Inspection of Certain Houses on Ewing street and Blue Island avenue. By JOHN HOPPER, Sanitary Police Officer.

5. Special Report on the Wooden Garbage-box Nuisance. By AMANDA M. JOHNSON, Inspector of Streets and Alleys, Nineteenth Ward.

6. Death Rates of the Ten Worst Wards, including the Nineteenth, January to November, 1896.

7. Population of the Nineteenth Ward, by Nationalities and Precincts.

8. Photographs of Typical Insanitary Premises: No. 1. 121 Law avenue, a two-story house, the lower floor of which is used as a barn, the upper floor occupied by fourteen Italian men and one woman. "The owner of the property, who conducts a saloon adjoining, saw nothing objectionable in the condition of his property, but the photograph shows the first floor used as a barn and the large pile of old rotten manure piled in the corner under the entrance to the second floor. Three dirty, vile privies are also shown in close proximity to the entrance. The second floor occupants were ordered to vacate and some attempt has been made to 'clean up,' but nothing but fire will do this."

No. 2 shows the rear of the buildings at the northeast corner of Ewing and Jefferson streets and is a typical rear view of the majority of houses in this district. They are old frame buildings and "many of them look as though an ordinary gale would topple them over, and an interior inspection of the dirt, filth and general insanitary conditions, convinces one that such an occurrence would be nothing short of a 'god-send.' The houses as a rule all have small rooms, into which are crowded many dirty, ignorant occupants. As many as ten adults are found crowded into a little room 10x12 in which they cook, eat, sleep and receive their visitors. The furnishings of the rooms consist of a stove, old dilapidated furniture and as many old home-made beds as the place will possibly hold. The beds are piled high with thick padded 'comforters' whose colors have long since disappeared under the accumulated dirt of months. The mattresses are indescribable, alive and crawling with vermin, grimy and rancid. In the majority of the rooms sunlight is an entire stranger, partly because of the crowded condition of things and largely because the windows have no whole panes, but are stuffed with rags and hung with pieces of old

carpet to keep the cold out. Ventilation is impossible from the same causes. These old frame houses, below grade, every room alive with vermin and packed to suffocation with an ignorant people, dirty to the utmost degree, the existing sanitary appliances old, imperfect and entirely inadequate, the almost entire absence of sunshine and proper ventilation, the floors saturated with water from the constantly running faucets (to prevent freezing), constitute a veritable culture-bed for the development of a contagion and explain the reason for the high mortality rate in this district."

No. 3. 225 Taylor street; an old low frame cottage, several feet below grade of the street. "Occupied by eight Greeks who sell fruit, apples and potatoes which they have stored in one of the rooms. The floors are old and water-soaked around the sink and covered with filth. The fruit is stored in a small unventilated room along with an abundance of old clothes and rags, reeking with filth and foul smelling." The apartment shown serves the purposes of a kitchen, dining-room and bedroom, containing two old beds and a cot, piled high with filthy bedclothes "that have, from appearance, done duty for months without an introduction to the wash-tub. The filthy and damp condition of the premises is due largely to the slovenly habits of the tenants, but the shanty itself is unfit for human habitation."

Nos. 4 and 5, interior and exterior views of No. 332½ Desplaines street, the banner "ramshackle" hut of the ward; "it would be hard to imagine a more dilapidated and filthy habitation. Even the photographs fail to convey an adequate idea of its condition."

9. Maps: (a) Showing character of streets and alleys, of habitations and of special disease causes in the Nineteenth Ward. (b) Showing density and character of population in the Nineteenth Ward, east of Halsted street. From *Hull House Maps and Papers*. (c) Showing weekly wages of families in Nineteenth Ward, east of Halsted street.—*Ibid*.

In furtherance of the suggestion that the City Council should "take the initiative by enacting necessary legislation," etc., the following correspondence was had between the COMMISSIONER OF HEALTH and the Corporation Counsel, resulting in the presentation to the City Council of the subjoined drafts of an ordinance and order, which are still under consideration by the Council at the close of the year :

DEPARTMENT OF HEALTH:

CITY OF CHICAGO, December 22, 1896.

HON. WM. G. BEALE,

Corporation Counsel, City.

DEAR SIR: I desire to submit to the City Council the draft of an ordinance empowering the COMMISSIONER OF HEALTH to recommend to the Council the paving and improvement of streets and alleys and the extension of sewers whenever he shall, after due investigation, determine that such measures are necessary for the public health. A large share of the excessive sickness and death rates in certain wards is due to the condition of the streets and alleys and want of sewers. These areas are chiefly occupied by the poorer classes, who pay exorbitant rents for the worst accommodations, while all improvements are fought by the landlords. The aldermen of such wards are reluctant to force them and would be glad to be relieved of the responsibility. I am advised that the Council, as a whole, would welcome this method of securing improvements necessary to the public health and welfare, and would act on the recommendation of the COMMISSIONER OF HEALTH, if he was duly authorized to make such recommendation.

I also desire your advice as to a more summary method of dealing with houses and premises unfit for human habitation. Sec. 1368 of the Municipal Code empowers the COMMISSIONER to condemn and order the vacation of such houses and premises, but does not authorize their destruction. (See also Sec. 1639, *ibid.*) Nothing short of their complete destruction will suffice in many cases. Vacated to-day by one set of unfortunates they will be occupied within thirty days by another. Would it be practicable and proper to confer upon the COMMISSIONER OF HEALTH the power of destruction, after condemnation by a board of survey, composed of a representative of the Building Department appointed by the Commissioner of Public Works, and of a sanitary and a medical inspector appointed by the COMMISSIONER OF HEALTH.

As this general subject is now under consideration by the Council Committee on Health, I shall be glad of a reply at your early convenience.

Very respectfully,

WM. R. KERR,

Commissioner of Health.

HON. WM. R. KERR,
Commissioner of Health.

DEAR SIR: Your letter of December 22d, requesting the draft of an order empowering you to recommend to the Council certain improvements, and also asking for an opinion as to the power of the Council to provide summary means for the abatement of buildings dangerous to health, has been referred this day to me for an answer.

In response thereto I enclose the draft of the order requested.

As to the second question I beg to say that in my opinion there can be no doubt of the power of the Council to provide by ordinance for the summary destruction of buildings dangerous to the public health. The charter of the city, paragraph 73, clause 75, gives the Council power "to declare what shall be a nuisance and to abate the same; and to impose fines upon parties who may create, continue or suffer nuisance to exist." The 78th clause gives the Council power "to do all acts and make all regulations which may be necessary or expedient for the promotion of health or the prevention of disease." The 84th clause gives the Council power "to compel the owner of any grocery or other unwholesome or nauseous house or place, to cleanse, abate or remove the same."

The power is thus plainly given to order the owners of such places as you mention to place the same in a good sanitary condition. Some means must be used to enforce the order. The Council may of course impose a penalty by fine for failure to abate such a nuisance; but it also has unquestionably the power to provide for the summary destruction of such buildings in the manner that you suggest. This is quite like the power of the police to destroy buildings in the hope of arresting a conflagration. To arrest the progress of disease is of no less importance than to arrest the progress of a fire. In *King vs. Davenport*, 98 Ill., page 305, our Supreme Court upheld an ordinance giving the city marshal authority to remove a wooden roof within the fire limits after failure to remove the same upon notification. No doubt such ordinance should provide for reasonable notice to the owner of the building either to place the same in a sanitary condition or to remove the same, but upon failure to comply with such notice I am of the opinion that the Council can authorize you, in the manner you suggest in your letter, to proceed to destroy the building.

Very truly yours,

EDWARD B. BURLING,

Assistant Corporation Counsel.

DRAFT OF AN ORDINANCE PROVIDING FOR THE REPAIR
OR DESTRUCTION OF BUILDINGS DANGEROUS
TO PUBLIC HEALTH.

WHEREAS, The continued existence of buildings of an unsanitary character in the City of Chicago is oftentimes a menace to the public health; and

WHEREAS, The only effective means of protecting the inhabitants of this city from disease arising from this source is by the repair or destruction of such buildings; therefore

Be it ordained by the City Council of the City of Chicago:

SECTION 1. Any building or part thereof which, by reason of its unsanitary condition or of its being infected with disease, is unfit for human habitation, or which from any other cause is a source of sickness among the inhabitants of this city, or which otherwise endangers the public health, is hereby declared to constitute a public nuisance.

SEC. 2. It is hereby made the duty of the COMMISSIONER OF HEALTH to cause an examination to be made of any building alleged to be a public nuisance for any of the foregoing reasons; such examination to be made by a Board of Survey, composed of one medical inspector, one sanitary inspector—both of whom shall be appointed by the COMMISSIONER OF HEALTH from his regular force of inspectors—and one building inspector from the regular force of building inspectors, who shall be appointed by the Commissioner of Public Works at the request of the COMMISSIONER OF HEALTH. If the said Board shall find and report that a public nuisance exists, as defined in the foregoing section, the COMMISSIONER OF HEALTH shall serve notice upon the owner of the building, or his agent, directing him to abate the nuisance and to place the building in a condition which shall not endanger the public health within such reasonable time as the Board of Survey shall recommend. Upon the failure of said owner or agent to obey said notice, the COMMISSIONER OF HEALTH shall, after the expiration of the time specified therein, abate the nuisance by ordering the demolition of the said building, or part or parts thereof, when such demolition is required by the public health of this city; and the Chief of the Fire Department is hereby authorized and instructed to furnish the necessary service for such demolition on the request of the COMMISSIONER OF HEALTH.

SEC. 3. This ordinance to be in force and effect from and after its passage.

DRAFT OF AN ORDER AUTHORIZING THE COMMISSIONER
OF HEALTH TO RECOMMEND STREET AND ALLEY
PAVING AND SEWER EXTENSION.

ORDERED, That, whereas, the public health is seriously affected by the unsanitary condition of the streets and alleys of the city, and by insufficient sewers, and since much sickness is caused thereby,

THEREFORE, The COMMISSIONER OF HEALTH is requested to report to the City Council from time to time the condition of the streets, alleys and sewers of the city, as affecting the public health, and he is further requested to recommend to the Council the passage of ordinances providing for the paving and improving of such streets and alleys and the construction of such sewers as he shall, after due investigation, determine are required by the public health.

Medical Inspection of Public Schools in Chicago with Reference to Prevention of Spread of Contagion and Infection.

PREFATORY NOTE BY THE ASSISTANT COMMISSIONER.

PRIOR to the beginning of the school year of 1896-97, the public schools were divided into eight districts,* to each of which a Medical Inspector was assigned by the following letter :

DEPARTMENT OF HEALTH, CITY OF CHICAGO.

September 1, 1896.

_____ M. D.

Medical Inspector in charge School District No. _____

DOCTOR: It is desired to exercise a more careful supervision over the health of the pupils of the public schools than has been practicable heretofore. You are, therefore, hereby assigned to duty, until otherwise advised, as Medical Inspector of the schools named in the enclosed list, comprised in School District No. _____

The objects of this supervision are sufficiently indicated in the following items of inspection, to which you are requested to give attention:

1st. The work of the Public Vaccinators—vaccinal status of the pupils as found by your inspection—compliance with the School Vaccination Order of the State Board of Health and City Ordinances concerning vaccination of school children, etc.

Children who present "satisfactory evidence of proper and successful vaccination," in accordance with the School Vaccination Order of the State Board of Health—which order is the law of the State and the basis of the City Ordinances concerning vaccination—will not be reinspected, but their certificates will be examined and viséd by the Inspector and then returned to the teacher. All others must be periodically examined by the Inspector. If satisfactory evidence of proper and successful vaccination is found upon the person, the Inspector will furnish the necessary certificate. If such "satisfactory evidence" is not found on inspection, the teacher will be notified of that fact and advised that

*Subsequently increased to nine districts.

the State Board of Health requires that the child be sent home with a note to the parent, stating that the child cannot be readmitted until it has been properly and successfully vaccinated, and presents to the teacher "satisfactory evidence" to that effect.

The DEPARTMENT prefers that the family physician perform the vaccination, but if the parent wishes it done by the DEPARTMENT, with the DEPARTMENT pure tested vaccine, the child may be sent or taken to any public vaccinator.

The Inspector will keep a record of all such cases, and on the return of the child to school he will examine the result, and if found successful he will visé the certificate; or, in order to prevent interruption of attendance, the child may be readmitted on a *Provisional Certificate* furnished at the time of the vaccination and to be replaced with the regular certificate when the vaccination is seen to be successful.

Teachers should retain the certificates until the close of the term, or until a child leaves a given class or room, when its certificate should be returned. This would prevent the present frequent loss of the certificates and would greatly reduce the time and labor now spent on inspection.

Whenever found necessary, the Inspector should take pains to explain clearly the scope and effect of the School Vaccination Order of the State Board of Health and the Vaccination Ordinances of the city. Such information is useful to teachers in explaining to parents the legal duty of the teacher, under penalty, to exclude unvaccinated children from school attendance.

2d. Precautions against spread of the communicable diseases—especially diphtheria, scarlatina and whooping cough. When pupils who are or have been in attendance in any school in your district are reported as having diphtheria or scarlatina, you will visit the room the child has been attending and, so far as practicable, ascertain if there are other cases of "sore throat" among the pupils. If any be found, refer the case to the family physician, with a proffer of the services of this DEPARTMENT in the matter of cultures, etc., or procure a culture yourself, if, in your best judgment, such is the proper course to pursue. (See page 58, Section 5, Antitoxin Report.)

If any child is found too ill to remain in school, you will advise the teacher to send it home for the care of its family and family physician. If ill from a contagious disease, you will order the child home, notify the family and the Chief Medical Inspector, Dr. GARROTT, who will enforce the necessary measures of isolation, etc.

School Inspectors will not assume the professional care or treatment of any case, but will invariably leave this to the family physician.

Inspections will be so made as to cause the least possible interruption to the routine of the school and the assistance and co-operation of the principals and teachers will be sought as an essential preliminary to the work.

3d. Inspection of the general sanitary condition of each school and its surroundings. And in this connection it is desired that special attention be paid to the prevalence of the acute intestinal diseases among the children with reference to the quality of the water supply.

Weekly reports of your inspections will be made on blanks furnished by the DEPARTMENT.

Respectfully,

F. W. REILLY, M. D.

Approved :

Assistant Commissioner.

WM. R. KERR,

Commissioner of Health.

Subsequently, at the suggestion of the Hon. THOMAS BRENNAN, Chairman of the Committee on School Management, a copy of the instructions to Medical Inspectors, and the following additional information concerning the duties of public vaccinators and of the Inspectors of the HEALTH DEPARTMENT in their relations to the public schools, were furnished to the principals and teachers :

First, as to the Public Vaccinators: These are required to be in attendance at their respective school buildings every Saturday during the school year, from 10 to 12 a. m., to vaccinate gratis all who may *voluntarily* present themselves for that purpose. They may also vaccinate on other days, after school hours, at the request of any principal or teacher. They are not authorized, as public vaccinators, to enter a school building at any other time or under any other circumstances. Principals and teachers are requested to report to the Commissioner of Health any assumption of such authority by a public vaccinator.

Nothing in the foregoing is to be construed as prohibiting a public vaccinator from vaccinating school children or others who voluntarily present themselves for vaccination at other times or places.

Instructions to this effect were issued before the opening of the present school term and were repeated September 10.

It seems advisable to be thus explicit on this point, because complaints have been received that some public vaccinators have invaded the schools during school hours and vaccinated in violation of these instructions. This will not be countenanced or tolerated by the DEPARTMENT, but the commissions of public vaccinators thus transgressing will be summarily revoked whenever the facts are presented to the Commissioner.

Second, as to the Medical Inspectors of Schools: At the close of the last school year—June, 1896—13 per cent. of all the public-school children examined were found to be in attendance in violation of the State Law and City Ordinances concerning vaccination and the evidence thereof. This percentage varies widely: Out of 751 scholars examined in one school, only 475, or less than 64 per cent., were found to be properly vaccinated and with valid certificates. On the other hand, in a large majority of schools, all pupils in attendance were found properly protected by vaccination and in possession of the proper certificate. So that there is, obviously, no insuperable difficulty in complying with the vaccination requirement, and the failure to secure such compliance would seem to be due, primarily, to lack of efficient inspection, and, secondarily, to want of familiarity with the State Law and City Ordinances on this subject.

To this the COMMISSIONER added :

“It is not necessary to dwell on the propriety or the necessity of this work. No principal or teacher in our public schools needs to have pointed out the importance of the physical welfare of the children in his or her charge. I regard it as an imperative duty of this DEPARTMENT to use every available effort to promote their health, to improve their sanitary surroundings and to guard against the interruption of their studies by enforcing precautions against the spread of the contagious and infective diseases—especially that loathsome pest, the smallpox. The active co-operation of all engaged in our public-school system is confidently anticipated.”

During the four months ended December 31, 1896, the Medical Inspectors of the HEALTH DEPARTMENT detailed to this school-inspection duty, formally inspected 233 public schools—making a total of 350 individual inspections and re-inspections—and investigated at the homes of the patients and at the schools attended by children from the houses in which the diseases were located, a total of 1417 cases of diphtheria—281 in September, 379 in October, 325 in November, 432 in December; and a total of 306 cases of scarlet fever—60 in September, 69 in October, 65 in November, 112 in December.

Insanitary defects, found in 19 schools, were reported to the Board of Education for remedy. These defects embraced overcrowding; defective heating, plumbing and ventilation; dark rooms; damp basements, and insufficient or uncleanly toilet accommodations. These results led to a general sanitary inspection of the public schools by the Bureau of Sanitary Inspection, which reported 39 additional schools requiring the attention of the School Board.

This first attempt at supervision of the health conditions of more than 200 000 of the population, at the most impressionable age-period, has resulted in so much of benefit that the DEPARTMENT will continue the work to the full extent of its resources.

OUR FIRST ATTEMPT AT SYSTEMATIC INSPECTION OF THE PUBLIC SCHOOLS.

ARVID H. WIMERMARK, M. D., *Medical Inspector.*

A COMPARISON of the tables of contagious diseases, given elsewhere, and those of previous years plainly shows what special efforts in the line of school inspection will accomplish. It becomes plain, at first sight, that the number of contagious diseases is far less in number this year, especially during the present school year, which began September 7th, 1896, than during previous years. It is an indisputable fact that the greatest source of infection from contagious diseases is found in the association of school children, whether it be in the school room or in the play ground, and this is the reason why the ASSISTANT COMMISSIONER laid so much stress on the necessity of isolation of these cases.

It is proper, I think, for the better understanding and appreciation of the magnitude of this undertaking that the profession and the laity be informed of the *modus operandi* of this work, which I will proceed to give.

Immediately upon the receipt of the physician's report of a case of contagious disease the Medical Inspector in charge of the school district in which the patient resides is notified of the existence of the disease. With the least possible loss of time he proceeds to the house, where he obtains the following data, besides name and address: First, what school, if any, the patient or other children of the family attend; second, if any other children in the house attend school; third, the sanitary condition of the house and its surroundings. Then he satisfies himself that the case is properly isolated and that the other children in the family are excluded from school. If the inspector has reason to think that other children in the house have been or may be

exposed they, also, are excluded from school. He then proceeds to the school to notify the principal of the existence of this case by leaving the card, of which the following is a copy, the name of the disease being duly indicated :

The Principal, _____ School.

Chicago, _____ 189

The HEALTH DEPARTMENT has just learned of the existence of a case of *Diphtheria* *Measles* *Scarlet Fever* *Whooping Cough* in the family of _____ living at _____ in the vicinity of your school.

For the protection of your pupils you are hereby authorized to exclude from school attendance, and from the buildings and grounds under your charge, all persons living on the above-described premises, especially school children if there be any such in the family.

This exclusion must be maintained until you are notified by the DEPARTMENT that the disease has terminated and that the premises have been disinfected.

You are also requested to warn the pupils of your school against any communication or contact with the members of the afflicted family during the period of exclusion.

Respectfully,

M. D.,
Medical Inspector.

The principal returns to the Contagious-Disease Division a postal card furnished by the DEPARTMENT, announcing his knowledge of the case. The following is a copy of this card:

_____ School.

Chicago, _____ 189

Received from Dr. _____ notification
of a case of *Diphtheria* *Scarlet Fever* *Measles* *Whooping*
Cough at No. _____ in
family named. _____

Principal.

The Inspector satisfies himself that there are no other cases existing, suspicious or real, which may have been exposed to the contagion in the school room in which this child may have attended. If there should be any pupil ailing, the Inspector orders the child sent home, with

instructions to the parents to call the family physician. If, in case of sore throat, in the judgment of the Inspector, it is necessary to secure a culture, he is so authorized. This he sends immediately to the Laboratory of the DEPARTMENT.

The following day, or within twenty-four hours, the Director-in-charge notifies the Inspector of the result. The Chief Medical Inspector is then notified and he resorts to such steps as, in his judgment, may be found necessary and expedient. It is also the duty of the Medical Inspector to inspect and report on the sanitary condition of the school.

In case the patient or other children do not attend any school, the postal card before mentioned is so marked and returned to the Contagious-Disease Division.

In the weekly report of this work, each Inspector is obliged to state minutely all the conditions he finds regarding each case, and to give the number and names of all the schools he has visited and inspected.

The DEPARTMENT is greatly indebted to the principals of schools, who have at all times extended to the Medical Inspectors every facility and aid. The teachers, too, deserve high commendation in this respect, as they fully realize how necessary it is that this work should be done. They aid us materially by keeping a watchful eye on the pupils for the detection of any ailment among them.

The Inspectors are forbidden to use any kind of tongue depressors that may again, and without proper disinfection, be used; to this end the Inspectors are furnished with wooden sputulas, which after one use are destroyed by burning. The Inspectors are also warned not to treat any case where a physician is in attendance, or give an opinion as to his treatment. The Inspector's only duty is to point out and enforce the necessary means to prevent the spread of disease, and to coöperate with the family physician to this end.

For the supervision of contagious diseases and the inspection of schools the city has been divided into nine districts, one Medical Inspector being assigned to each, giving an average of more than twenty square miles for each Inspector to cover and the number of schools assigned to each is about thirty, with branches varying in number from ten to twenty. Contemplating this herculean task, it is not amiss to call attention to an article on school inspection in New York in the *Boston Medical and Surgical Journal* of December 10, 1896. After stating that it is the opinion of the profession generally that the greatest source of transmission of infection and of contagious diseases among children is through their contact with one another in the schools, it says, that "at a meeting of the New York Board of Estimate and Apportionment, a daily inspection of the pupils of each school by a physician appointed for the purpose was proposed, whose duty it should also be to ascertain if the absent children were ill with contagious disease. In order to defray the expense of such an examination of pupils, they asked for funds to employ an extra corps of one hundred and fifty physicians."

For the sake of comparison, let us look at some facts which are non-controvertible: Manhattan Island, comprising the City of New York, consists of fifty-eight square miles, a territory not quite equal to that covered by three Inspectors in this city, and while each school is not daily examined here, the work performed is prodigious in its volume and more remarkable still when we contemplate how much good has been accomplished.

It can be but a question of time when our citizens will demand an increase in the corps of Medical Inspectors, to the end that as much good may be done for our 208,000 school children as is done for a lesser number in the cities of New York or Boston, with a greater force of Inspectors.

The Board of Education has built as many new school houses as their building fund would permit, and the modern buildings are perfect in their appointments; but the number of old-fashioned, ill-ventilated and ill-lighted school houses greatly outnumber the modern buildings, and it is the experience of every watchful Medical Inspector that the number of sick children in these buildings greatly outnumber those in the new school houses. Referring again to the *Boston Medical and Surgical Journal* (April 9, 1896,) in Dr. S. H. Durgin's article on medical school inspection in the public schools of Boston, after giving tables of the various diseases which the regular Medical Inspectors find in the schools, Dr. Durgin says: "I would not overlook the many faulty conditions of homes and which are beyond our control, but we are painfully aware that in many of our school houses there are such grave deficiencies in ventilation, heating and cleanliness, with the attendant excessive heat or cold and sudden alternations from one to the other, that we are warranted in concluding that a proportion of the many ills of children while in school is due to the attendance there."

This coming, as it does, from such an authority, should be enough to move those in whose power it lies to lose no time in giving to the little ones the remedy they so sorely need in our own schools.

57 CLEVELAND AVENUE.

WORK OF THE DISINFECTING CORPS.

J. A. EGAN, M. D., *Medical Officer in Charge.*

[EARLY in May, 1896, one of the Medical Inspectors was assigned to the charge of the disinfectors and their work. As a first step and in order to test the efficacy of the process and methods of disinfection then in vogue each disinfecter was supplied with two or more tubes containing cultures of the potato bacillus, *B. mesentericus v.* He was required to expose these in apartments during fumigation under prescribed conditions, varied from time to time by the Medical Inspector in charge. On their return the tubes were examined as to the effect upon the bacillary growth. The results at first obtained were somewhat disconcerting. In more than two-thirds of the tubes returned the growth was found proceeding vigorously, entirely unaffected by its supposed exposure to the sulphur dioxide.

The following table, furnished by DR. GEHRMANN, shows the results of some of these tests as made in the Laboratory. Where the exposed culture showed growth after return the fumigation was repeated.

RESULTS OF CULTURE TESTS OF FUMIGATIONS.

| DATE. | FUMIGATOR. | CUBIC FEET. | S LBS. | No. hours | CULTURE USED. | TUBES. | RESULT. | CONTROLS. |
|--------------|------------|-------------|--------|-----------|---|--------|----------|---------------------------------|
| May 12 | French .. | 2500 | 10 | 4½ | B. Mesentericus vulgaris. Agar streak. | Open | + ⅝ in. | Growth in all control cultures. |
| | French... | 2500 | 10 | | | Closed | + ¾ in. | |
| May 13 | Kapp..... | 2600 | 10 | 3½ | | Open | + 1¾ in. | |
| | Kapp..... | 2600 | 10 | | | Closed | + | |
| May 14 | Kapp..... | 1500 | 8 | 5 | | Open | + | |
| | Kapp..... | 1500 | 8 | | | | | |
| May 14 | Daly..... | 2000 | 10 | 4½ | | Closed | + ¾ in. | |
| | Daly..... | 2000 | 10 | | | | | |
| May 15 | Daly..... | 2400 | 12 | 5 | | Closed | + ¼ in. | |
| | Daly..... | 2400 | 12 | 5 | | Open | + | |
| | Daly..... | 1100 | 8 | 3 | | Closed | + | |
| | Daly..... | 1100 | 8 | 3 | | Open | + | |
| May 18 | Lindholm | 1200 | 8 | 5½ | | Open | + 1 in. | |
| | Lindholm | 1200 | 8 | 5½ | | Closed | + 1 in. | |
| | Lindholm | 900 | 7 | 6 | | Open | — | |
| | Lindholm | 900 | 7 | 6 | | Closed | — | |
| May 19 | Kapp..... | 2500 | 10 | 5 | | Closed | — | |
| | Kapp..... | 2500 | 10 | 5 | | Open | — | |
| May 19 | Bell..... | 2080 | 14 | 6 | | Open | — | |
| | Bell..... | 2080 | 14 | 6 | | Closed | — | |
| May 19 | Bell..... | 3040 | 15 | 3½ | | Open | — | |
| | | | | | | Closed | — | |
| May 23 | Lindholm | 800 | 4 | 6 | B. Mycoides. Agar streak. | Open | — | Growth in all control cultures. |
| | Lindholm | 800 | 4 | 6 | | Closed | — | |
| May 23 | French .. | 1600 | 6 | 5 | | Open | — | |
| | French... | 1600 | 6 | 5 | | Closed | — | |
| May 23 | Daly..... | 3565 | 18 | 6 | | Open | — | |
| | Daly..... | 3565 | 18 | 6 | | Closed | + 1½ in. | |
| May 26 | Bell..... | 2300 | 18 | 6½ | | Open | + ½ in. | |
| | | | 18 | 6½ | | Open | + ½ in. | |
| | | | 18 | 6½ | | Closed | + ⅝ in. | |
| May 20 | Daly..... | 700 | 4 | 3½ | | Closed | — | |
| | Daly..... | 700 | 4 | 3½ | | Open | — | |
| May 21 | Lindholm | 3000 | 12 | 4 | | Open | — | |
| | Lindholm | 3000 | 12 | 4 | | Closed | ++ | |
| May 22 | Daly..... | 3240 | 10 | 6 | | Closed | ++ | |
| | Daly..... | 3240 | 10 | 6 | | Open | ++ | |
| May 22 | French... | 2140 | 10 | 6 | | Closed | — | |
| | French... | 2140 | 10 | 6 | | Open | — | |

It is probable that the practical success of previous disinfections—which success had been inferred from the rare occurrence of subsequent outbreaks in disinfected premises—was due to the washing of surfaces and other application of the bichloride and to the free ventilation made necessary by the sulphur fumigation. The culture-tube test sufficiently demonstrated that the fumigations, of themselves, had little to do with the “practical success.”

There was, however, a distinct improvement in the efficacy of the fumigations, as shown by this test, after the disinfectors were subjected to skilled supervision. When the tubes—rolled up in bedding, placed beneath carpets and rugs and otherwise exposed in the apartments under treatment—are brought back to the Laboratory it is the rare exception when they now show any growth. As the test is one which cannot be tampered with and escape detection in the Laboratory it affords a valuable means of checking the faithfulness of the fumigation. Its use promptly resulted in the combustion of a larger quantity of sulphur, a longer period of exposure, a more careful sealing of doors, windows and other apertures and a more abundant supply of moisture in the air of apartments. DR. EGAN was placed in charge of this work in July, 1896, and his report follows.—F. W. R.]

DURING the year ending December 31, 1896, the following work was performed by the disinfectors and fumigators of the DEPARTMENT:

| | For Diphtheria. | For Scarletina. |
|--|-----------------|-----------------|
| Number of premises placarded..... | 2728 | 764 |
| Number of placards removed..... | 1899 | 408 |
| Number of premises disinfected | 996 | 166 |
| Number of cubic feet of space disinfected. | 2 710 310 | 166 220 |

In addition fifty-eight disinfections were made by the van, traveling a distance of 700 miles. The articles sterilized were principally clothing, bedding and baggage.

While the agents employed in room disinfection are not entirely satisfactory, so far as convenience, absence of objectionable features, and rapidity are concerned, the methods of work of the disinfecting corps, the manner in which orders are received, executed and reported upon, are as near perfect as possible. During the entire year no complaint meriting consideration, relative to delay in placarding or fumigation, has been received, and no intimation that the latter was not efficiently done; on the contrary, the majority of physicians accord the highest praise to the work of the

corps, and call for its services in all cases where disinfection is deemed necessary and cannot be efficiently performed by the family.

Each morning the disinfectors assemble at the Bureau of Contagious Diseases to receive orders for the day's work, and to render in writing reports of services rendered on the day previous. These are made on the subjoined blank forms which are self-explanatory.

HEALTH DEPARTMENT: CITY OF CHICAGO.

BUREAU OF CONTAGIOUS DISEASES.

DISINFECTOR'S DAILY REPORT OF PREMISES PLACARDED.

J. A. EGAN, M. D., Medical Officer in Charge of Disinfection.

Sir: I have this _____ day of _____ 1896,

placed } Placard for } Diphtheria
removed } } Scarletina

on the premises at _____

miles from office _____

The Placard was placed on _____ door _____

at _____ M.

Remarks: _____

(Signature) _____

Reports will be rendered every morning, except Sundays and holidays. If no work has been performed on the day previous, the fact will be noted across face of blank.

Care should be taken in making out reports, so that no doubt will exist regarding disposition of card, the disease or the time.

HEALTH DEPARTMENT : CITY OF CHICAGO.

BUREAU OF CONTAGIOUS DISEASES.

DISINFECTOR'S DAILY REPORT OF DISINFECTION PERFORMED.

J. A. EGAN, M. D., Medical Officer in Charge of Disinfection.

Sir: I hereby report that I have this _____ day
of _____ 1896, disinfected for _____
the premises at _____
miles from office _____
Number rooms disinfected _____
Area of rooms _____ cubic ft.
Sulphur used _____ lbs.
Fumigation begun at _____ M.
Rooms opened up at _____ M.
Other disinfection performed: _____

(Signature:) _____

Each disinfecter is assigned to a particular district, and after noting the premises to be placarded or fumigated equips himself with the necessary placards, sulphur, pasters and alcohol, and proceeds to his duties. Fumigations are attended to first and, while the sulphur is burning, placards are put up. The fumigated rooms are several hours later opened up and full directions given the family regarding further disinfection with mercuric chloride, soap and hot water and other agents if indicated.

As intimated above, the agents used for the disinfection of apartments which have been occupied by persons sick with an infectious disease are sulphur, mercuric chloride, soap and hot water. To these may be added an abundance

of fresh air and sunlight, if obtainable, and such germicides, referred to further on, as may be particularly called for. Where sulphur is used its employment precedes that of the other disinfectants. The rooms to be fumigated are stripped of carpets and all unnecessary furniture, etc., which are exposed to the sunshine and air. All articles which might be injured by the corrosive sulphurous-acid fumes are also removed, the apartments are then made as air-tight as possible, all spaces around windows, transoms and doors sealed with pasters of gummed paper, and keyholes and all apertures covered likewise. The sulphur, about $1\frac{1}{2}$ kilograms to each 30 cubic meters of air space, is broken into small pieces in an iron pan, which is set upon a brick or two in a tub containing a little water. The disinfector moistens the fragments of sulphur thoroughly with alcohol, and after igniting the mass leaves the room and carefully seals the door of egress. The apartments are kept closed from six to twenty-four hours. The time is necessarily limited where three or four rooms constitute the abode of the family, and all require fumigation. In the majority of cases the rooms must be occupied that night, since the family cannot go elsewhere. When the rooms are opened the family is instructed to wash all the surfaces thoroughly with a solution of 1 to 1000 mercuric chloride, and to scrub the floor and all woodwork with soap and hot water. Wherever practicable twenty-four hours' free ventilation is insisted upon.

For disinfection of clothing, baggage, bedding, woolen material, etc., too valuable to be destroyed, the disinfecting van is employed. This is manned by an engineer and driver, and, drawn by three horses, is quickly sent to any part of the city upon request of a physician. It has been used extensively during the year, and has been the means of saving many valuable articles of bedding, clothing, etc., which otherwise it would have been deemed unsafe to keep. Its

services have been especially valuable where cases of diphtheria have occurred in "sweat shops," and similar places, which has happened several times. The infection in the clothing was eradicated after being kept in the van for two hours, in a temperature of 121°C . and that in the apartments and shop destroyed by a prolonged and thorough application of sulphurous-acid gas. The services of the van, as of the members of the disinfecting corps, are, of course, free.

For other disinfection the following agents are used: Chlorinated lime in 4 per cent. solution, or in powder; mercuric chloride in 1 to 500 per cent. solution; carbolic acid in 5 per cent. solution, or carbolic acid 100 c. c. to 4 litres of water; destruction by fire; boiling in water for half an hour; immersion in solution of mercuric chloride, 1 to 1000, or exposure to dry heat at a temperature of 121°C . for two hours. For the body of one dead from diphtheria, scarlet fever, smallpox or other contagious disease, a solution of mercuric chloride in the proportion of 8 grammes to 1 litre of water is used.

With formaldehyde ($\text{C H}_2 \text{O}$) a gaseous body prepared by subjecting methyl alcohol to oxidation—claimed to be the most powerful sterilizing agent and disinfectant known, "possessing the very highest germicidal properties, destroying micro-organisms even in attenuated solutions of high states of diffusion, and ranking above all other antiseptics on account of its absolutely neutral character, being neither acid nor alkaline and wholly devoid of caustic or corrosive properties or toxicity to higher forms of life"—very extensive experiments have been made during the past few months. This substance, first made known by Von Hoffman in 1867, was considered only as a chemical curiosity until 1886, when Lowe and Fischer discovered that it possessed considerable germicidal power. Very little advantage seems to have been taken of this knowledge, and

it was not until 1890, when its antiseptic properties were announced by Berlioz and Trillat, that efforts were made to construct suitable apparatus for generation of the gas. Various experiments were made during the following four years, and almost simultaneously, during 1885, the Gambier and Trochet, the Tollens, Krell and Trillat lamps were described in the foreign medical press. While these lamps differed in minor particulars, the principle of all was essentially the same, the Trillat alone requiring boiling of the alcohol. The process consists in passing methyl-alcohol vapor mixed with air over a red-hot platinum spiral or heated platinized asbestos, the simplest method being by suspending a spiral or thin platinum wire or small piece of sheet platinum over the wick of an ordinary spirit lamp, which should be lighted and quickly extinguished, when the platinum continues to glow and the formic aldehyd is produced.

None of the lamps referred to above being for sale in this country, specimens of all known American apparatus have been procured, and repeated tests made in the most painstaking manner, under conditions much more favorable than obtain with the ordinary disinfector or in the dwellings usually fumigated. No satisfactory result has been obtained with any of them, and at the close of the year formaldehyde had not yet supplanted the sulphur dioxid for practical disinfection in the work of the DEPARTMENT.

The preparation known as "formalin," containing 40 per cent. of formaldehyde, is an ideal disinfectant and antiseptic wherever it can be used, and is far preferable to the corrosive-sublimate solution—cost not considered—for spraying, washing surfaces and similar purposes. By exposure to heat the CH_2O is liberated and aerial disinfection thus secured. It is, probably, in this direction that we must look for the practical disinfection of apartments, etc., by formaldehyde.

Statistics, Tables, Circulars, etc., of the Contagious Diseases Division.

STATISTICS OF THE SMALLPOX EPIDEMIC.

THE Smallpox Epidemic of 1893-1895, which had been predicted by the present ASSISTANT COMMISSIONER OF HEALTH, DR. REILLY, in the spring of 1892,* when Secretary of the State Board of Health, dates from June, 1893.† On the 12th of that month (June, 1893) the first case of what proved to be a grave epidemic was discovered. The last case was removed to the City Isolation Hospital December 2, 1895, and was discharged December 22, 1895—since which time, up to the close of 1896, there has been no smallpox in Chicago.

Between January 1, 1893, and December 22, 1895, there occurred 3754 cases of smallpox, with 1213 deaths. The details of these cases and deaths during 1893 and 1894 are given in the Annual Reports for the respective years. Those for 1895 and a summary of the epidemic are hereto appended.

During the height of the epidemic in the spring of 1894, the clerical force of the DEPARTMENT was unable to record the cases and deaths in accurate detail. This will account for certain discrepancies in the tables published for that year, as to cases and deaths distributed by wards and months—the aggregates for the year, however, being the same. The appended summary has been made up from the Isolation Hospital records, and the figures given are substantially correct.

* See *Fifteenth Annual Report, Illinois State Board of Health. Minutes of the April, 1892, meeting, et. seq.*

† There had, however, been sporadic cases in 1893 prior to June, to-wit: 3 cases in January, 3 cases and 1 death in February, and 5 cases in April. But the continuous series of cases constituting the epidemic began June 12, 1893.

CASES OF SMALLPOX REMOVED FROM EACH WARD TO ISOLATION
HOSPITAL: BY MONTHS DURING 1895.

| TOTAL CASES FROM— | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|-------------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| Ward First | 2 | 6 | 5 | 2 | 2 | ... | ... | ... | ... | ... | ... | ... | 18 |
| Second | 12 | 1 | 2 | ... | 15 | ... | ... | ... | ... | ... | ... | ... | 30 |
| Third | 6 | 5 | 1 | ... | 1 | 1 | ... | ... | 1 | ... | ... | ... | 15 |
| Fourth | 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 |
| Fifth | 3 | 3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 6 |
| Sixth | 9 | 9 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 19 |
| Seventh | 5 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5 |
| Eighth | 4 | 7 | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 13 |
| Ninth | 5 | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 6 |
| Tenth | 32 | 5 | 6 | 2 | 1 | ... | 1 | 5 | ... | 1 | ... | ... | 53 |
| Eleventh | 1 | 3 | ... | ... | ... | ... | ... | 6 | ... | ... | ... | ... | 10 |
| Twelfth | 6 | 4 | ... | ... | 3 | ... | ... | 1 | ... | ... | ... | ... | 14 |
| Thirteenth | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 |
| Fourteenth | 4 | 2 | 5 | 3 | ... | ... | ... | ... | ... | 2 | 1 | ... | 17 |
| Fifteenth | 19 | 8 | 12 | 6 | ... | ... | 3 | 4 | ... | ... | 3 | 2 | 57 |
| Sixteenth | 22 | 12 | 5 | 38 | 5 | 3 | 1 | ... | ... | 1 | 1 | ... | 88 |
| Seventeenth | 2 | 3 | 2 | 3 | ... | 1 | ... | ... | ... | ... | ... | ... | 11 |
| Eighteenth | 1 | 1 | 16 | 11 | 5 | 2 | ... | ... | ... | ... | ... | ... | 36 |
| Nineteenth | 4 | 2 | 2 | 1 | 1 | ... | ... | ... | 1 | ... | ... | ... | 11 |
| Twentieth | 7 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 8 |
| Twenty-first | ... | ... | ... | 2 | 1 | 1 | ... | ... | ... | ... | ... | ... | 4 |
| Twenty-second | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 0 |
| Twenty-third | 1 | ... | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 2 |
| Twenty-fourth | 1 | ... | ... | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | 3 |
| Twenty-fifth | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 |
| Twenty-sixth | 1 | 1 | ... | ... | 1 | ... | ... | ... | ... | ... | 1 | ... | 4 |
| Twenty-seventh | ... | 2 | ... | ... | ... | ... | 2 | ... | ... | ... | ... | ... | 4 |
| Twenty-eighth | 1 | ... | ... | 1 | ... | 1 | ... | ... | ... | ... | ... | ... | 3 |
| Twenty-ninth | 3 | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 5 |
| Thirtieth | 12 | 4 | 1 | ... | 1 | ... | ... | ... | 2 | 5 | ... | ... | 25 |
| Thirty-first | 14 | 2 | ... | ... | 2 | ... | ... | ... | ... | ... | ... | ... | 18 |
| Thirty-second | 4 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 4 |
| Thirty-third | 2 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 |
| Thirty-fourth | 7 | ... | 1 | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | 10 |
| Residence unknown | ... | 2 | 2 | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 5 |
| Totals | 192 | 85 | 66 | 72 | 40 | 11 | 7 | 16 | 4 | 9 | 6 | 2 | 510 |

DEATHS OF SMALLPOX CASES REMOVED FROM EACH WARD TO
ISOLATION HOSPITAL: BY MONTHS DURING 1895.

| TOTAL DEATHS OF CASES FROM— | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|--------------------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| Ward First | 1 | 2 | 3 | | 1 | | | | | | | | 7 |
| Second | 4 | | 4 | | | | | | | | | | 8 |
| Third | 3 | 2 | | | | | | | | | | | 5 |
| Fourth | | | | | | | | | | | | | |
| Fifth | 1 | 1 | | | | | | | | | | | 2 |
| Sixth | 3 | 1 | 2 | | | | | | | | | | 6 |
| Seventh | 2 | | | | | | | | | | | | 2 |
| Eighth | 1 | 2 | 3 | | | | | | | | | | 6 |
| Ninth | 2 | | | | | | | | | | | | 2 |
| Tenth | 11 | 1 | 4 | | | | 1 | 2 | | | | | 19 |
| Eleventh | | 1 | | | | | | 2 | | | | | 3 |
| Twelfth | 2 | 1 | 1 | | | | | | | | | | 4 |
| Thirteenth | | | | | | | | | | | | | |
| Fourteenth | 1 | 3 | | 1 | | | | | | | | | 5 |
| Fifteenth | 5 | 4 | 4 | 2 | | | 1 | 1 | 1 | | | | 18 |
| Sixteenth | 7 | 2 | 1 | 5 | 9 | 1 | 1 | | 1 | | | | 27 |
| Seventeenth | | 1 | 1 | | 1 | | | | | | | | 3 |
| Eighteenth | | | 4 | 4 | 2 | 1 | | | | | | | 11 |
| Nineteenth | 2 | | 1 | | | | | | | | | | 3 |
| Twentieth | 1 | 1 | | | | | | | | | | | 2 |
| Twenty-first | | | | | 1 | | | | | | | | 1 |
| Twenty-second | | | | 1 | | | | | | | | | 1 |
| Twenty-third | | | | | | | | | | | | | |
| Twenty-fourth | | | | | | | | | | | | | |
| Twenty-fifth | | | | | | | | | | | | | |
| Twenty-sixth | 1 | | | | | | | | | | | | 1 |
| Twenty-seventh | | | | | | | | 1 | | | | | 1 |
| Twenty-eighth | | | | | | | | 1 | | | | | 1 |
| Twenty-ninth | | | | 1 | | | | | | | | | 1 |
| Thirtieth | 3 | 1 | 2 | | | | | | | | | | 6 |
| Thirty-first | 3 | | | | 1 | | | | | | | 1 | 5 |
| Thirty-second | 1 | | | | | | | | | | | | 1 |
| Thirty-third | | | | | | | | | | | | | |
| Thirty-fourth | 2 | | | | | | | | | | | 1 | 3 |
| Residence unknown | | | 3 | | | | | | | | | | 3 |
| Totals | 56 | 23 | 33 | 14 | 15 | 2 | 3 | 7 | 2 | | | 2 | 157 |

SUMMARY OF SMALLPOX CASES AND DEATHS BY WARDS FOR THE
YEARS 1893, 1894, 1895.

| CASES AND DEATHS IN | 1893. | | 1894. | | 1895. | | TOTALS. | |
|------------------------|--------|---------|--------|---------|--------|---------|---------|---------|
| | Cases. | Deaths. | Cases. | Deaths. | Cases. | Deaths. | Cases. | Deaths. |
| Ward First..... | 13 | 2 | 200 | 66 | 18 | 7 | 231 | 75 |
| Second..... | | | 72 | 21 | 30 | 8 | 93 | 29 |
| Third..... | | | 38 | 11 | 15 | 5 | 53 | 16 |
| Fourth..... | | | 43 | 13 | 2 | | 45 | 13 |
| Fifth..... | 4 | 1 | 36 | 12 | 6 | 2 | 46 | 15 |
| Sixth..... | 15 | 2 | 68 | 20 | 19 | 6 | 102 | 28 |
| Seventh..... | 5 | 1 | 56 | 16 | 5 | 2 | 66 | 19 |
| Eighth..... | | | 65 | 19 | 13 | 6 | 78 | 25 |
| Ninth..... | | | 154 | 51 | 6 | 2 | 160 | 53 |
| Tenth..... | 18 | 3 | 970 | 344 | 53 | 19 | 1041 | 366 |
| Eleventh..... | 4 | 1 | 59 | 18 | 10 | 3 | 73 | 22 |
| Twelfth..... | | | 168 | 57 | 14 | 4 | 182 | 61 |
| Thirteenth..... | | | 59 | 17 | 1 | | 60 | 17 |
| Fourteenth..... | 2 | | 57 | 19 | 17 | 5 | 76 | 24 |
| Fifteenth..... | 3 | | 58 | 18 | 57 | 18 | 118 | 36 |
| Sixteenth..... | 14 | 2 | 66 | 22 | 88 | 27 | 168 | 51 |
| Seventeenth..... | 2 | | 57 | 18 | 11 | 3 | 70 | 21 |
| Eighteenth..... | 19 | 3 | 247 | 82 | 36 | 11 | 302 | 96 |
| Nineteenth..... | 10 | 2 | 155 | 50 | 11 | 3 | 176 | 55 |
| Twentieth..... | | | 13 | 2 | 8 | 2 | 21 | 4 |
| Twenty-first..... | 6 | 1 | 14 | 2 | 4 | 1 | 24 | 4 |
| Twenty-second..... | | | 15 | 2 | | | 15 | 2 |
| Twenty-third..... | | | 56 | 18 | 2 | 1 | 58 | 19 |
| Twenty-fourth..... | | | 35 | 7 | 3 | | 38 | 7 |
| Twenty-fifth..... | | | 13 | 2 | 1 | | 13 | 2 |
| Twenty-sixth..... | 12 | 2 | 22 | 20 | 4 | 1 | 38 | 23 |
| Twenty-seventh..... | 4 | 1 | 11 | 1 | 4 | 1 | 19 | 3 |
| Twenty-eighth..... | | | 66 | 21 | 3 | 1 | 69 | 22 |
| Twenty-ninth..... | 4 | 1 | 49 | 14 | 5 | 1 | 58 | 16 |
| Thirtieth..... | | | 51 | 15 | 25 | 6 | 76 | 21 |
| Thirty-first..... | | | 24 | 7 | 18 | 5 | 42 | 12 |
| Thirty-second..... | | | 32 | 9 | 4 | 1 | 36 | 10 |
| Thirty-third..... | 5 | 1 | 7 | | 2 | | 14 | 1 |
| Thirty-fourth..... | | | 37 | 11 | 10 | 3 | 47 | 14 |
| Residence unknown..... | | | 31 | 28 | 5 | 3 | 36 | 31 |
| Totals..... | 140 | 23 | *3104 | *1033 | 510 | 157 | *3754 | *1213 |

*Includes twenty-eight found dead by the Medical Inspectors during the spring of 1894; not distributed in this table by wards.

SUMMARY OF SMALLPOX CASES AND DEATHS BY MONTHS FOR THE
YEARS 1893, 1894, 1895.

| MONTHS. | 1893. | | 1894. | | 1895. | | TOTALS. | |
|----------------|--------|---------|--------|---------|--------|---------|---------|---------|
| | Cases. | Deaths. | Cases. | Deaths. | Cases. | Deaths. | Cases. | Deaths. |
| January..... | 3 | ..... | 181 | 56 | 192 | 56 | 376 | 112 |
| February..... | 3 | 1 | 233 | 72 | 85 | 23 | 321 | 96 |
| March..... | ..... | ..... | 305 | 100 | 66 | 33 | 371 | 133 |
| April..... | 5 | ..... | 544 | 186 | 72 | 14 | 621 | 200 |
| May..... | ..... | ..... | 665 | 222 | 40 | 15 | 705 | 237 |
| June..... | 1 | 1 | 424 | 140 | 11 | 2 | 436 | 143 |
| July..... | 6 | ..... | 117 | 39 | 7 | 3 | 130 | 42 |
| August..... | 9 | 1 | 118 | 37 | 16 | 7 | 143 | 45 |
| September..... | 3 | 1 | 94 | 29 | 4 | 2 | 101 | 32 |
| October..... | 9 | 4 | 125 | 38 | 9 | ..... | 143 | 42 |
| November..... | 35 | 2 | 131 | 40 | 6 | ..... | 172 | 42 |
| December..... | 66 | 13 | 139 | 46 | 2 | 2 | 207 | 61 |
| Totals..... | 140 | 23 | *3104 | *1033 | 510 | 157 | *3754 | *1213 |

* Includes twenty-eight found dead by the Medical Inspectors during the spring of 1894; not distributed in this table by months.

STATISTICS OF PUBLIC VACCINATION.

IN June, 1895, the system of public vaccination by the DEPARTMENT previously in vogue was suspended for reasons given elsewhere in this report. On the discovery of the glycerinized vaccine lymph the work was resumed in the following August at public vaccination stations in every part of the city; such stations being at all public schools on Saturdays, between ten and twelve o'clock a. m., at police stations at night, at physicians' offices and at other convenient places, to the number of four hundred and twenty. Public vaccinators, commissioned by the DEPARTMENT, were appointed to vaccinate gratis all applicants and to visit for the same purpose all manufactories, railroad shops, department stores, packing houses and like places, where large numbers of persons are employed.

The following rules and regulations were issued in circular form for the information of the public and the guidance of the vaccinators of the DEPARTMENT:

RULES AND REGULATIONS CONCERNING VACCINATION BY
THE PUBLIC VACCINATORS.

COMPILED BY

F. W. REILLY, M. D., Assistant Commissioner and E. GARROTT, M. D.,
Chief Medical Inspector.

"WHAT IS CALLED VACCINATION is, in a vast number of persons in the United States and the rest of the world, only so in name and not in reality," wrote the eminent sanitarian, Dr. Elisha Harris.

"All persons—amateurs, druggists, old women, midwives, etc.—are allowed to vaccinate in any way they think proper, and the persons operated on are considered vaccinated," says Mr. Marson, speaking of vaccination in England.

"Medical men are found to vary exceedingly in their estimate of a satisfactory vaccine vesicle and cicatrix, or the reverse, for their standard is comparative rather than absolute." (Seaton, Sanderson, Buchanan.)

"This is exactly what might have been expected," says Aitkin, "seeing that medical students are left to pick up their knowledge of vaccination where they can. In fact, practical medical education at our schools of medicine has hitherto, or until very recently, been entirely *nil* in regard to this most important subject."

Dr. Henry A. Martin, who has devoted a lifetime to the subject, says: "My belief has very long been that in no country has vaccination been carried on less satisfactorily than in the United States. Not so far as the percentage vaccinated; for, in the older States, that is undoubtedly large, but in the character of the vaccination done. When we reflect that even in our most pretentious medical colleges vaccination was not, until lately, thought worth teaching, and the protection of the people had to be done by men who had never even learned what a perfect vaccine vesicle was, it is hardly to be wondered at that vaccination in America has been done very badly."

Dr. Hardaway, one of the recent writers on the subject, says: "I doubt if there is a civilized land where less is known of the theory and practice of vaccination than in America."

And Dr. John H. Rauch, after more than a third of a century's practical experience, declared that vaccination as commonly performed tended, first, to beget a false sense of security among large numbers who imagined themselves protected against smallpox, simply because they had had their arms made sore; second, to degrade and belittle the operation in the eyes of the laity, who have come to believe that parents, druggists, barbers, midwives, nurses and old women of both sexes were competent to vaccinate and to pronounce upon the sufficiency of the vaccination; and, third, to cause an increasing loss of faith in the protective power of vaccinia because so many of those believed to be vaccinated were subsequently attacked by smallpox.

To these charges should be added that of a vast amount of avoidable suffering and, not infrequently, of actual disease and surgical injury—adenitis, lymphangitis, cellulitis, axillary abscesses, indolent ulcers, septicemia and various eruptions—caused either by septic vaccine, or by neglect of aseptic precautions, or by bloody and wholly unnecessary exposure of the absorbent surface.

Much of the prejudice against vaccination, much of the want of faith in its efficacy and much of its actual failure are due to the causes above set forth.

To remedy these defects and so to restore the practice of vaccination to the professional and popular esteem in

which it was justly held during the first third of the Jennerian era, as "an absolutely certain preventive of smallpox," is the work before the Public Vaccinators of Chicago. In the measure that their work is successful will be the measure of protection of the community against another epidemic of smallpox; and this is the end sought for by the DEPARTMENT OF HEALTH.

The first steps to this end are that the operation shall be made—

SAFE—*Absolutely free from the danger of causing or conveying any other disease or disability.*

EFFECTIVE—*So that those who are certified by a COMMISSIONED VACCINATOR to be vaccinally protected against smallpox may have such ground for belief in the Certificate as modern medical science and skill can furnish.*

TO RENDER THE OPERATION SAFE.—The DEPARTMENT has instituted a radical change in the method of procuring and furnishing vaccine. After a rigid examination of all vaccine "points" obtainable, this form of vaccine has been abandoned: First, because contamination was found so frequently; and, second, because of the large percentage of failures following the use of the "point." During June and July, 1895, experiments with a *liquid vaccine*, rendered sterile by glycerine and put up in sealed glass tubes, have given such satisfactory results that it has been formally adopted by the DEPARTMENT to the absolute exclusion of the "point."

Every instalment of the vaccine material as soon as received is tested; first, bacterially, in the Municipal Laboratory, by Dr. Gehrman, for the presence of septic organisms, and next, clinically, by Dr. Garrott, as to its potency. No instalment is distributed the samples of which give cultures of any of the pathogenic bacteria, or which fall below the fixed standard of vaccinal activity.

TO RENDER THE OPERATION EFFECTIVE.—Given an aseptic and a potent vaccine, it remains for the Vaccinator to enforce scrupulous cleanliness, to exercise due skill, to observe uniformity of method, to record results accurately.

1. *Cleanliness.*—Vaccinators are authorized to refuse to operate on a dirty person, or one whose garments are dirty—at least so far as the covering of the arm is concerned. Instruct such as to the danger of getting very "sore arms" from personal dirt, and tell them to come again after they have washed thoroughly and put on a clean garment.

Immediately before scarifying cause the site of the operation to be again washed with clean water—rubbing sufficiently to remove the loose "scarf skin." The slight

capillary congestion thus caused will also favor the absorption of the vaccine. There is no objection to the use of a boracic-acid solution, but this is not necessary if the subject is reasonably clean and the arm is washed with plain clean water and well rubbed immediately before operating.

2. *Technique of the Operation.*—Jenner distinctly says that “a single pustule [vesicle] is sufficient to secure the constitution from the smallpox; but as we are not always certain the puncture may take effect it will be prudent to inoculate in both arms or to make two punctures in the same arm about an inch and a half apart, except in very early infancy when there is great susceptibility of local irritation.”

For practical purposes the rule of the DEPARTMENT is a single insertion for an infant, *two* insertions for a primary vaccination in a child under puberty (12 to 14 years) and *three* for any revaccination.

In operating, the left arm—the right if the subject is left-handed—rests in the hand of the Vaccinator, the skin over the insertion of the deltoid along its posterior border being drawn tense by the thumb and fingers. One or more longitudinal incisions—according to age as above indicated—are then quickly made with the point of a sterilized instrument.

Each incision should be about one-half to three-fourths of an inch long and only deep enough to reach, without wounding, the true skin. *No blood must be drawn*, but only so much of the tissue penetrated as is necessary to secure the direct application of the vaccine to the *cutis vera*.

If two incisions are made they must be about an inch and a half apart; if three, the third should be one inch and a half below and equidistant from the upper two.

With the skin still held tense the vaccine is then applied and rubbed gently into the gaping incisions, when the operation is complete.

No dressing is required in a vaccination thus performed; after a few minutes' exposure to allow of the glazing over of any serum that may have oozed from an incision, a clean soft handkerchief or other soft linen or cotton material is fastened to the inside of the shoulder of the inner garment so as to hang down loosely in folds over the wounded surface; this will prevent irritation by friction or chafing and is all that is necessary. No plaster, salve or bandage is ever to be used.

The instrument should be dipped in clean water and dried after each operation; and immediately before use must be sterilized by passing through a gas jet or the flame of a match—heat is the best sterilizer for this purpose.

3. *Uniformity of Method and Results.*—Uniformity in the technique of the operation is essential to the determination of the results of vaccination—especially as shown by the cicatrix. Dr. Martin says:

“A perfect typical vaccination, of a duration and intensity at all approaching a proper standard and which has not been interfered with in a very unusual manner, results in the production of a scar as distinct and defined as if stamped by a sharply-cut die; and the scars of a hundred such vaccinations are almost as like each other as the impressions on a hundred coins fresh from the mint.”

Uniform vaccination, performed as indicated above, will give these uniform results; and the “Certificate of Successful Typical Vaccination” is warranted and must be issued only when the resulting scar or cicatrix is not less than *one-third of an inch in diameter, depressed, dead white in color, characteristically pitted and perfect in outline.*

If the arm does not present a scar of this description, it is sufficient evidence that the person was not properly vaccinated; that the so-called vaccination was done with impure or deteriorated vaccine; or that the person was in a condition which prevented a full and perfect evolution of the protective process; or that the vesicle was broken or otherwise injured so as to interfere with the normal development of the vaccinal phenomena.

Any material departure from the standard above defined can not be accepted as a successful “typical” vaccination. While an operation resulting in a scar varying from this standard may confer a certain degree of protection, revaccination is imperative where the variation is material. In any such case the operation should be repeated until the Vaccinator is assured of insusceptibility to vaccinia.

4. *When to Vaccinate.*—Vaccination being the artificial production of a constitutional disease, it is, manifestly, of the greatest importance that the individual whom it is proposed to subject to its influences should be in as good health as is fairly attainable. Therefore, weak, feeble or sickly infants, those presenting evidence of some disorder of nutrition or of functional disturbance, as from dentition, indigestion, etc.; or suffering from diarrhea or other bowel affection or presenting chafed or abraded cutaneous surfaces on any portion of the body, or any form of cutaneous eruption; or during the period of weaning—should not be vaccinated except in the presence of smallpox contagion. Acute febrile diseases and intestinal and cutaneous—especially vesicular—affections tend to modify and complicate the vaccinal action, and these conditions, therefore, warrant the postponement

of the operation until they have subsided. On the other hand, there are many chronic diseases of a grave character, syphilis, for example, which do not interfere with vaccination, nor contra-indicate the operation. This is especially true of scrofula and consumption, diseases which have been favorably affected to a very marked degree by the introduction of vaccination. Scrofulous subjects, however, or those exhibiting a pre-disposition to that cachexia, should not be vaccinated—except in cases of emergency—during the first year or two of life. Sound judgment dictates that they be protected during this early period of development from any serious constitutional disturbance—and the same may be said of those exhibiting a marked phthisical or tuberculous predisposition.

Under ordinary circumstances, neither the menstrual period, gestation or lactation offers any obstacle to vaccination; but cases will occasionally present themselves in which some disturbance or complication of these functions may dictate its temporary postponement.

The existence of erysipelas, diphtheria or scarlet fever on the premises or in the immediate vicinity renders great care necessary, if, indeed, it should not positively forbid the operation. Recent exposure to the infection of these diseases also makes it advisable to postpone until after the period of incubation.

As already intimated, however, there are few, if any, conditions which would justify neglect or even postponement of vaccination in the presence of the smallpox contagion.

Within the above limitations vaccination should be performed during the first few months after birth—except in the presence of smallpox, when it should be performed *as soon as possible*.

It must be repeated soon after puberty, and thereafter whenever a case of smallpox is reported in the community.

A successful typical vaccination in infancy, repeated after puberty, is an absolute protection against smallpox, in the large majority of individuals for life. But since this protection dies out sooner in some individuals it is wise to try the operation at regular intervals—say five to seven years—and *always when smallpox exists*.

Punctuality in attendance at the prescribed times and stations—accuracy and promptness in making and forwarding reports—and earnestness in promoting the propaganda of safe and efficient vaccination, by personal effort and by the distribution of the publications of the DEPARTMENT on the subject, are confidently anticipated from the Commissioned Vaccinators.

DETAILS OF WORK PERFORMED BY THE VACCINATION CORPS
DURING 1895.

| PLACES. | BY EMERGENCY STAFF. | | | | BY COMMISSIONED PUBLIC VACCINATORS. | | | |
|-----------------------------|---------------------|-----------------------------|-------------------------------|--------------------------------|-------------------------------------|-----------------------------|-------------------------------|--------------------------------|
| | Number. | Number of Persons Examined. | Number of Persons Vaccinated. | Number of Certificates Issued. | Number. | Number of Persons Examined. | Number of Persons Vaccinated. | Number of Certificates Issued. |
| Schools { Public | 43 | 31 855 | 2 701 | 3 980 | 174 | 59 828 | 27 341 | 16 404 |
| Private | 3 | 1 002 | 359 | 987 | 2 | 90 | 77 | 63 |
| Parochial | 24 | 27 169 | 4 007 | 4 711 | 22 | 8 460 | 2 434 | 1 909 |
| Lodging houses..... | 22 | 2 447 | 1 250 | 1 047 | 51 | 5 342 | 1 798 | 363 |
| Manufacturing estab's | 13 | 7 896 | 1 271 | 820 | 78 | 19 043 | 7 563 | 208 |
| Department stores | | | | | 17 | 7 933 | 1 966 | 50 |
| Railroad shops..... | | | | | 8 | 1 658 | 485 | 24 |
| Police stations | 20 | 1 645 | 902 | 109 | 12 | 1 895 | 1 368 | 167 |
| Stock yards..... | | | | | 1 | 6 490 | 4 302 | 500 |
| House to house work..... | 59 167 | 354 044 | 44 173 | 2 021 | 2 592 | 11 434 | 1 159 | 276 |
| Work done in offices | * | 4 205 | 887 | 411 | ..... | 6 428 | 5 408 | 3 208 |
| Totals ..... | ..... | 430 263 | 55 550 | 14 086 | ..... | 128 601 | 53 901 | 23 372 |

* Office work of Emergency Staff was done at County Agent's office.

GRAND TOTALS OF WORK PERFORMED BY VACCINATION CORPS
DURING 1895.

| PLACES. | | Number of Places. | Number of Persons Examined. | Number found Vaccina- ted. | Number Vaccina- ted. | Number Certifi- cates Issued. |
|-------------------------------|-----------------|-------------------------|-----------------------------------|-------------------------------------|----------------------------|--|
| Schools | Public | 217 | 91 683 | 61 641 | 30 042 | 20 384 |
| | Private | 5 | 1 092 | 656 | 436 | 1 050 |
| | Parochial | 46 | 35 629 | 29 188 | 6 441 | 6 620 |
| Lodging houses..... | | 73 | 7 789 | 4 741 | 3 048 | 1 410 |
| Manufacturing establishments. | | 91 | 26 939 | 18 105 | 8 834 | 1 023 |
| Department stores..... | | 17 | 1 933 | 5 967 | 1 966 | 50 |
| Railroad shops..... | | 6 | 1 658 | 1 173 | 485 | 24 |
| Police stations..... | | 32 | 3 540 | 1 270 | 2 270 | 276 |
| Stock yards..... | | 1 | 6 490 | 1 188 | 4 301 | 500 |
| House to house | | 61 769 | 365 478 | 320 146 | 45 332 | 2 297 |
| Office vaccination*..... | | | 10 633 | 4 338 | 6 295 | 3 619 |
| Totals | | | 558 864 | 449 413 | 109 451 | 137 358 |

* Including work at County Agent's office.

DETAILS OF WORK PERFORMED BY VACCINATION CORPS DURING 1896.

| AT | EXAMINATIONS, VACCINATIONS, ETC. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Totals. |
|-------------------------------|---|----------|-----------|--------|--------|-------|-------|-------|---------|------------|----------|-----------|-----------|---------|
| Public schools. | Number of persons examined..... | 9 370 | 3 701 | 9 726 | 726 | 8 565 | 7 636 | | | 20 404 | 17 336 | 14 072 | 6 638 | 98 174 |
| | Number of persons found vaccinated..... | 6 970 | 1 107 | 6 681 | 515 | 7 492 | 7 782 | | | 12 403 | 3 333 | 4 750 | 2 180 | 53 213 |
| | Number of vaccinations performed..... | 2 400 | 2 594 | 3 045 | 211 | 1 073 | 854 | | | 8 001 | 13 003 | 9 322 | 4 458 | 44 961 |
| | Number of certificates issued..... | 3 110 | 3 007 | 4 916 | 315 | 954 | 2 464 | | | 12 997 | 17 010 | 13 700 | 2 180 | 60 653 |
| Parochial schools. | Number of persons examined..... | 3 718 | 1 821 | 3 201 | | 3 339 | 847 | 6 592 | 2 718 | 2 915 | 850 | 1 287 | 5 406 | 32 894 |
| | Number of persons found vaccinated..... | 2 662 | 819 | 2 101 | | 2 179 | 614 | 5 402 | 1 752 | 2 315 | 212 | 231 | 2 803 | 21 090 |
| | Number of vaccinations performed..... | 1 056 | 1 002 | 1 100 | | 1 160 | 233 | 1 190 | 966 | 600 | 638 | 1 056 | 2 803 | 11 804 |
| | Number of certificates issued..... | 1 218 | 1 603 | 2 317 | | 367 | 345 | 1 465 | 1 147 | 1 325 | 800 | 3 150 | 5 010 | 18 747 |
| Manufacturing establishments. | Number of persons examined..... | 3 310 | 4 127 | 400 | 5 732 | 200 | | 290 | | | 12 210 | 3 783 | 3 885 | 33 907 |
| | Number of persons found vaccinated..... | 1 912 | 2 187 | 371 | 3 506 | 100 | | 170 | | | 9 770 | 1 653 | 826 | 20 495 |
| | Number of vaccinations performed..... | 1 298 | 1 940 | 26 | 2 226 | 100 | | 90 | | | 2 440 | 2 130 | 3 059 | 13 412 |
| | Number of certificates issued..... | 218 | 314 | 11 | 217 | 10 | | 90 | | | 129 | 2 019 | 3 120 | 6 128 |
| Lodging houses. | Number of persons examined..... | 3 000 | | | | | | | | | 1 465 | 6 392 | 3 619 | 14 476 |
| | Number of persons found vaccinated..... | 2 235 | | | | | | | | | 1 150 | 4 794 | 2 729 | 10 988 |
| | Number of vaccinations performed..... | 765 | | | | | | | | | 315 | 1 598 | 892 | 3 570 |
| | Number of certificates issued..... | 38 | | | | | | | | | 475 | 1 920 | 811 | 3 244 |
| Railroad shops. | Number of persons examined..... | 3 217 | | | | | | | | | | 5 400 | | 8 617 |
| | Number of persons found vaccinated..... | 2 002 | | | | | | | | | | 3 900 | | 5 902 |
| | Number of vaccinations performed..... | 1 215 | | | | | | | | | | 1 500 | | 2 715 |
| | Number of certificates issued..... | 122 | | | | | | | | | | | | 122 |
| Police stations. | Number of persons examined..... | 8 111 | 11 001 | 4 721 | 7 112 | 599 | | | | | 3 165 | 12 278 | 10 500 | 57 487 |
| | Number of persons found vaccinated..... | 5 621 | 7 147 | 3 224 | 4 675 | 274 | | | | | 2 472 | 9 133 | 5 937 | 38 483 |
| | Number of vaccinations performed..... | 2 490 | 3 854 | 1 497 | 2 437 | 325 | | | | | 693 | 3 145 | 4 563 | 19 004 |
| | Number of certificates issued..... | 412 | 4 321 | 1 584 | 2 895 | 372 | | | | | 792 | 4 500 | 3 109 | 17 485 |

DETAILS OF WORK PERFORMED BY VACCINATION CORPS DURING 1896—Continued.

| AT | EXAMINATIONS, VACCINATIONS, ETC. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Totals. |
|--|---|----------|-----------|--------|--------|--------|--------|-------|---------|------------|----------|-----------|-----------|---------|
| County Agent's office. | Number of persons examined..... | 255 | 253 | 415 | 237 | 374 | 376 | 110 | ..... | ..... | ..... | ..... | 355 | 2 375 |
| | Number of persons found vaccinated..... | 145 | 23 | 98 | 30 | 94 | 52 | 75 | ..... | ..... | ..... | ..... | 30 | 477 |
| | Number of vaccinations performed..... | 110 | 250 | 377 | 217 | 280 | 324 | 35 | ..... | ..... | ..... | ..... | 235 | 1 899 |
| Free dispensaries. | Number of certificates issued..... | 102 | 235 | 355 | 291 | 256 | 305 | 50 | ..... | ..... | ..... | ..... | 297 | 1 801 |
| | Number of persons examined..... | ..... | 395 | 251 | 250 | ..... | ..... | 80 | 136 | ..... | 286 | 138 | ..... | 1 488 |
| | Number of vaccinations performed..... | ..... | 370 | 174 | 224 | ..... | ..... | 29 | 60 | ..... | 71 | 222 | ..... | 1 549 |
| House to house. | Number of certificates issued..... | ..... | 350 | 149 | 192 | ..... | ..... | 41 | 69 | ..... | 215 | 110 | ..... | 1 126 |
| | Number of persons examined..... | 451 | 500 | 456 | 360 | 1 800 | 1 815 | 524 | 6 164 | 2 800 | 1 690 | 1 393 | 930 | 18 878 |
| | Number of persons found vaccinated..... | 51 | 40 | 35 | 27 | 1 200 | 1 115 | 42 | 5 769 | 2 106 | 210 | 175 | 44 | 10 814 |
| Vaccinators' offices. | Number of vaccinations performed..... | 400 | 460 | 421 | 333 | 600 | 695 | 482 | 395 | 694 | 1 480 | 1 218 | 886 | 8 064 |
| | Number of certificates issued..... | 373 | 389 | 365 | 300 | 529 | 815 | 479 | 417 | 401 | 1 375 | 850 | 850 | 7 102 |
| | Number of persons examined..... | 210 | 290 | 149 | 273 | 235 | 412 | 256 | 527 | ..... | ..... | ..... | 826 | 3 178 |
| Totals for months and years. | Number of vaccinations performed..... | 190 | 169 | 144 | 140 | 200 | 365 | 226 | 492 | ..... | ..... | ..... | 786 | 2 712 |
| | Number of certificates issued..... | 186 | 190 | 135 | 295 | 185 | 350 | 210 | 450 | ..... | ..... | ..... | 736 | 2 727 |
| | Total number of persons examined..... | 31 642 | 22 088 | 19 262 | 14 695 | 15 112 | 11 081 | 7 823 | 9 525 | 26 119 | 37 002 | 44 743 | 32 359 | 270 410 |
| Total number of tubes of vaccine distributed (by months).... | Total number of persons found vaccinated..... | 21 598 | 11 323 | 12 450 | 8 743 | 11 339 | 8 563 | 5 688 | 7 521 | 16 824 | 18 147 | 24 636 | 14 549 | 159 670 |
| | Total number of vaccinations performed..... | 10 024 | 10 619 | 6 786 | 5 788 | 3 538 | 2 471 | 2 052 | 1 913 | 9 295 | 18 640 | 20 091 | 17 772 | 109 189 |
| | Total number of certificates issued..... | 5 779 | 10 490 | 983 | 3 894 | 2 673 | 4 279 | 2 385 | 2 083 | 14 723 | 20 796 | 26 249 | 16 133 | 103 529 |
| Total number of tubes of vaccine distributed (by months).... | | 13 230 | 10 000 | 4 240 | 4 590 | 6 220 | 7 780 | 2 500 | 6 940 | 19 720 | 12 220 | 17 650 | 11 640 | 116 430 |

GRAND TOTALS OF WORK PERFORMED BY THE VACCINATION CORPS
DURING 1896.

| PLACES. | Number of Persons Examined. | Number of Persons found Vaccinated. | Number of Persons Vaccinated. | Number of Certificates Issued. |
|----------------------------------|-----------------------------------|--|-------------------------------------|--------------------------------------|
| Schools { Public..... | 98 174 | 53 213 | 44 961 | 60 653 |
| { Parochial | 32 894 | 21 090 | 11 804 | 18 747 |
| Manufacturing establishments.... | 33 907 | 20 495 | 13 412 | 4 080 |
| Railroad shops | 8 617 | 5 902 | 2 715 | 122 |
| Lodging houses..... | 14 476 | 10 988 | 3 570 | 3 244 |
| Police stations..... | 57 487 | 38 483 | 19 004 | 3 992 |
| County Agent's office..... | 2 287 | 389 | 1 898 | 1 796 |
| House to house..... | 18 254 | 10 190 | 8 064 | 6 803 |
| Free dispensaries..... | 1 391 | ..... | 1 049 | 1 224 |
| Office vaccinations | 2 923 | ..... | 2 712 | 2 868 |
| Totals | 270 410 | 159 670 | 109 189 | 103 529 |

SOME CIRCULARS OF THE DEPARTMENT.

RESTRICTION AND PREVENTION OF CONSUMPTION.

PREPARED BY

F. W. REILLY, M. D., Assistant Commissioner.

So much attention has recently been given to this subject, such severe and sweeping restrictive measures have been advocated, and there has been so much sensational writing about the ravages of the "Great White Plague," that it has seemed worth while to set forth plainly the facts as to Consumption, its extent, its character and the simple precautions which will prevent its spread.

As a matter of fact, when compared with other large cities of the United States, Chicago stands remarkably well as to Pulmonary Consumption, or Consumption of the Lungs—which is the common form of the disease, and the one referred to in this circular.

The last United States Census (1890) gives a list of all cities—forty-five in number—which have reliable statistics concerning diseases. Chicago ranks sixth in the list as to least number of deaths from consumption, as will be seen in the following from the *Mortality Statistics, United States Census, 1890*, pp. 8, 9:

DEATHS FROM CONSUMPTION PER 1000 DEATHS FROM ALL CAUSES.—Cleveland, 73; Davenport and Omaha, 74 each; St. Paul, 75; Detroit, 80; Chicago, 84—followed by Buffalo, 94; Milwaukee, 96; St. Louis, 97; Brooklyn, 113; Baltimore, 119; New Orleans, 121; Philadelphia, 124; Cincinnati, 127; New York, 135; Washington, 139; Boston, 152; San Francisco, 162; and so on up to a city in Iowa, which had 206 deaths from consumption out of every 1000 deaths from all causes, or more than one-fifth the total deaths from this one cause alone—the rate for the whole country being one-eighth and for Chicago only one-twelfth.

It is further gratifying to know that the disease is steadily—although, of late years, but slowly—declining in this city. Taking the last forty years there has been a reduction of nearly 40 per cent. in the mortality from consumption. During the first ten years, 1855–1864 inclusive, there was a yearly average of nearly 27 deaths from the disease in every 10 000 of population. During the last ten years, 1885–1894, the annual average has been a little over 16 per 10 000. Last year there were 2158 deaths from this cause. In the proportion of forty years ago, there would have been 4210.

It is said in the foregoing that the disease, although steadily, is but "slowly" declining of late years. In the ten years from 1855 to 1864 the consumption deaths averaged nearly 270 per 100 000 population; in the next decade, 1865-1874, they averaged less than 180—a reduction of about one-third. But in the last decade, 1885-1894, the reduction was only 5.5 per cent. from that of the previous ten years.

The causes of the great reduction—one-third—in the second decade from the first, are very obvious to the sanitarian. Consumption is a disease of damp localities—undrained sites—inadequate sewerage. Chicago was built in a swamp, and its early death rate was frightful. The raising of the grade of the city was begun in 1855; the present sewerage system was begun in 1856, and during the next ten years, not only the consumption death rate, but the death rate from all causes was greatly reduced.

We have, however, apparently nearly reached the limit of benefit from these sanitary improvements, so far as consumption is concerned.

If there is to be any further reduction it must be by recognizing the fact that *consumption* is "catching," that a healthy person can contract it from the expectoration of one already sick with the disease.

The cause of consumption is a germ or microbe contained in the matter expectorated, or coughed up. When this matter becomes dry the germ is carried about in the air, and if inhaled by a person not in robust health or in any other way predisposed to disease, he may "catch" consumption—just as an unvaccinated person may "catch" smallpox, or one with an unhealthy throat may "catch" diphtheria, by inhaling the germ-laden breath, or coming in contact with the other excretions of a smallpox or diphtheria patient.

The lesson of prevention is obvious.

If the expectorations of all consumptives were destroyed before they get dry there would be no spread of the disease.

There is no need of bad-smelling disinfectants for this purpose. Either fire or water is all-sufficient—not that water alone will kill the consumption germ; but so long as the germ is kept moist it won't float in the air to get into the lungs and set up the disease in others.

Consumptives, whether at home or abroad, should spit only into bits of cloth or rags or paper provided for the purpose, and these should be burned before they get dry. Or, if they spit into cups or vessels, these should contain water, and should be emptied frequently into the sewer through the waste pipes—the sewage-germs will take care of the consumption germs without any disinfection.

This is the one practical essential for the restriction of the spread of consumption. All else—as to isolation of patients, placarding and quarantining of houses, compulsory notification of cases by physicians and registration by health authorities, proscription of tuberculous meat and milk, etc.—are of minor importance compared with this. Some of these measures are repulsive and others are wholly impracticable.

The one other thing which the DEPARTMENT OF HEALTH may do—in addition to emphasizing the paramount importance of *destroying consumptive matter before it gets dry*—is to take charge of consumption-infected premises and make them safe for future occupancy. This the DEPARTMENT is ready and desirous to do.

Upon receipt of a request to that effect from the attending physician or from the head of the household, addressed to the DEPARTMENT OF HEALTH, a Medical Inspector will be detailed to examine and determine—in co-operation with the attending physician—what measures of disinfection are necessary, and these will be carried out and a certificate of disinfection furnished by the DEPARTMENT without charge. Intending tenants of premises that have been occupied by consumptives should require the production of such a certificate.

TO THE CONSUMPTIVE DIRECT.—Your *breath* is not infectious, and people need not fear you on that account.

Only what you *cough up* is dangerous, and that only when it gets *dry*. If this is spat up in your room on the floor and elsewhere, and allowed to become dry it will poison the air so that you may re-infect yourself and thus weaken or destroy the chance of your recovery.

When you cough do not swallow what comes up in your throat; spit it out, either into a bit of rag or paper, to be burned at once, or into water in a cup or vessel to be emptied frequently into the sewer through the waste pipes; the sewage germs will destroy the consumptive germs. By swallowing again there is danger of extending the disease to the bowels.

Do not let others kiss you indiscriminately, and *never* without first carefully wiping your lips with carbolized rose-water and thoroughly drying them.

Consumption is not hereditary and, consequently, parents need not fear that they will transmit it to their children—*except*, that the close and intimate relations between a consumptive mother and her child increase the danger of infection if the coughed-up matter is allowed to become dry before it is destroyed.

Most importantly: Remember that consumption is not necessarily a fatal disease. Many persons who have died of other diseases have been found with healed-up scars in the lungs, showing that they had been cured of consumption. More cases of consumption are cured by medical aid than is generally known—especially in this climate. Follow your doctor's instructions implicitly and don't impair his chance of curing you by re-infecting yourself. Insist on having all your expectorations promptly destroyed—for your own sake as well as for the sake of others.

TO THE FAMILY OF A CONSUMPTIVE.—Study the principle underlying the foregoing. Make it a family duty incumbent on every member to see that no expectorated matter is allowed to get dry before being burned or emptied into the waste pipes.

Handkerchiefs should not be used by the consumptive; but if they are they should be immersed in water after such use and kept wet until they can be thoroughly boiled. Articles of clothing, bedding, etc., that may be accidentally soiled with the consumptive sputa, should be treated in the same way, or be thoroughly sponged off with carbolized water.

Spoons, cups, glasses and other articles used by a consumptive should be thoroughly washed and scalded as soon after use as possible.

When in doubt as to other details of this kind consult the doctor and rely upon him implicitly.

TO THE PUBLIC.—The duty of the public as to consumption is obvious.

Discourage the practice of *public expectoration*, both by precept and example. It is not only offensive to those who witness it, but dangerous to those who come along later when the expectoration is dried up, powdered and floating in the air.

Thrust a copy of this circular into the hands of the next person you see hawking and spitting on the street or in a public place or vehicle. Your doctor can get as many copies as he desires by sending for them to the HEALTH DEPARTMENT, Room 4, City Hall.

July, 1895.

HOT-WEATHER CARE OF INFANTS AND YOUNG CHILDREN.

PREPARED BY

F. W. REILLY, M. D., Assistant Commissioner.

Last year, 1894, there were 7,334 deaths of infants under one year of age, or more than 14 deaths out of every 100 Chicago babies. And one-fifth of the whole number died in the month of July alone. The chief cause that the doctors find for this dreadful increase of the death rate is the hot weather. July is the hottest month every year in Chicago, and last July was even hotter than usual.

The weather can't be changed ; but proper feeding, suitable clothing, cleanliness and fresh air will do much to make baby life more comfortable, to ward off sickness and prevent death in any weather. The following advice is offered by the DEPARTMENT OF HEALTH for this purpose.

Heat kills off babies and young children largely because it spoils their milk and other food quickly. Even breast milk, when the mother is overheated, may give the baby colic or "summer complaint." If a mother is very hot she should draw a teaspoonful or so from the breast before nursing her baby. If the breast has not been given for two hours or more it should be drawn off in the same way. And if the mother has been badly frightened or very angry or excited, it is not safe to give the breast at all ; it should be drawn and the milk thrown away.

THE PROPER FOOD FOR BABIES IS MOTHER'S MILK.—No sensible mother needs advice on this point. If she is fairly healthy her breasts will give all the nourishment her child should have until it begins to cut its teeth—the sixth to eighth month. Up to this time it is a sin to give an infant one morsel of solid food of any kind, or anything but breast milk (if the mother is healthy), except water in very small quantity occasionally, *but never soon after nursing.*

Many infants are killed every year by bringing them to the table with the family and giving them a little bit of this, that and the other—meat, vegetables, pie, pickles, etc., which the little stomach is not fitted for. They are "*killed*" just as surely, though not so quickly, as if they had been fed poison out of a drug store.

When the baby that is fed this way sickens and dies it is called "diarrhea," or "dysentery," or "cholera infantum," or "summer complaint," or "teething," or "convulsions," or "brain fever." But these are only names for the result of poisoning with unfit food.

Wait till the baby gets its teeth before you put food into its mouth that needs to be chewed.

IF THE BREAST MILK GIVES OUT, or becomes thin and watery, or if the mother has consumption or any other long-standing sickness, the baby must be put on the bottle and fed with cow's milk.

Get the best milk you can afford, and if it isn't good, or "sours" too soon, or doesn't give enough cream, *send word to the Health Office in the City Hall.* Be sure to give your name and address and a Milk Inspector will be sent to find out where the trouble is.

As soon as the milk is received take what is to be used for the baby and "scald" it. *Don't let it boil.*

A good way is to set a pan of cold water on the stove and put the vessel containing baby's milk into this pan; just as soon as the water comes to a boil take it off. This amounts to what is called "sterilizing" or "Pasteurizing" the milk. Add a pinch of baking soda to the hot milk—half a teaspoonful to a quart.

If the milk was sweet and hadn't begun to "turn" when it was received it will keep sweet for twenty-four hours or more after being treated this way, even in hot weather. But, of course, it should be kept in a close-covered vessel, or fruit jar or stoppered bottle. Whatever it is kept in should be thoroughly scalded—cover, stopper and all—before the fresh milk is put in.

If you have an ice box or refrigerator to put the milk in, or can in any other way keep it from "turning," it is better to let it stand for about six hours and then pour off the upper half for the baby's milk. This should then be "scalded" and soda added as before described. If you can't do this a little cream should be added to the baby's milk—say one tablespoonful of cream to two or three of the milk.

To make this nearly like breast milk take two cups of water that has been boiled, to each cup of milk and add enough white sugar to make it as sweet as breast milk. If this mixture is too rich the baby will throw it up in curds or lumps, or it will pass through the bowels in white flakes and shreds. If this happens add more boiled water to the mixture until you find just what strength the baby's stomach will stand—what it can digest.

WHEN THE BABY IS ABOUT A MONTH OLD barley water should be used instead of plain water. Put two tablespoonfuls of pearl barley in four cups of cold water; boil an hour or more—down to two cups; strain through a close cloth; add a pinch of salt and sweeten with white sugar to breast-milk taste. Add this to a cup of "scalded" cow's-milk treated as first described and begin feeding this strength.

Gradually use more milk and less barley water, until at about six months of age the child is getting two-thirds milk and one-third barley water.

Next to healthy breast milk this will make as good food as the infant can get during teething and weaning. Then comes the pure milk—always “scalded”—bread and milk, baked potato and milk, oatmeal porridge—which can’t be boiled too long, *never less than two hours*—and always eaten with milk, and the milk always “scalded,” *not boiled*.

DON'T OVERFEED THE BABY.—Once in about two hours is often enough to suckle or feed a baby until it is four or five weeks old ; after that do not feed so often.

When a baby is about six months old it will generally thrive best if fed only once during the night and four or five times regularly during the day. It is bad for baby’s stomach and bowels to feed it too often or too much at a time—especially in hot weather.

A new-born baby’s stomach will hold from two to three tablespoonfuls, and not more than this amount—rather less—should be given at a time during the first week or so of a bottle-fed baby’s life.

As the baby grows the quantity should be gradually increased, so that at the end of the first month it may be taking about four tablespoonfuls at a meal. Some children will require more and others will not stand so much—but *there is more danger of giving too much at a time than too little*.

DON'T STICK THE NIPPLE IN THE BABY'S MOUTH EVERY TIME IT CRIES.—If the baby is properly fed at regular times it won't get hungry enough to make it cry, and it is foolish to feed it whenever it cries instead of trying to find out the trouble. It may be only thirsty and a few drops of cold water—not a big drink—will stop it ; or its clothes may be uncomfortable, or its napkin need changing.

Try to find out what makes it cry, and then use “mother wit.”

DON'T FEED THE BABY WITH A SPOON.—Sucking is the natural way that a baby takes its food. It needs the sucking action of the lips and mouth and tongue to mix its food with the fluids of the mouth and to keep it from getting into the stomach too fast.

Spoon feeding doesn't do this.

USE A PLAIN COMMON BOTTLE FOR FEEDING, with a rubber nipple and no tube.

Fancy nursing bottles, with long rubber tubes and patent contrivances, besides costing money, can't be cleaned easily,

and babies don't do well with them in other ways. The more simple the bottle and the nipple, the better for the baby. The rubber-tube bottle is a device of the evil one for lazy mothers. It's bad enough when a mother can't suckle her own infant at her own breast; let her at least take it in her arms and hold the bottle and "mother" it while it feeds.

Take the nipple off after each feeding and wash both nipple and bottle in boiling water *at once*. Before using again rinse the bottle and nipple in clean water—about a quart of water—with half a teaspoonful of soda in it; or keep them in a pan of soda and water when not in use.

More babies get "sore mouth" and "wind colic" and "summer complaint" from want of care of the nursing bottle than from any other one cause. A little stale milk around the neck of the bottle or in the nipple will set up a ferment which is poison to the delicate lining of a baby's mouth and throat and stomach.

Of course, the baby's bottle-food should be warm—about the same as breast milk, or "blood heat;" that is, as warm as the inside of the mouth.

KEEP THE BABY CLEAN AND IT WILL STAND THE HEAT BETTER.—When the thermometer is at eighty to ninety in the shade it isn't easy to keep the baby cool. But it can always be kept clean, and will then be more comfortable and have a better chance of living through the hot weather. It should have at least one full bath every day and oftener during extreme heat. Never bathe within an hour after feeding it. Bathe first; feed afterwards.

Dress as lightly as possible. It will be better stark naked some hours a day during the hot weather when indoors.

But keep it in the open air, out of the hot sun, as much as you can between sunrise and sunset. The out-door air, even of a dirty street, is fresher and better than the air in the house.

Fresh air is the breath of life in a baby's nostrils. Take it or send it to the parks, or open squares, or the lake shore as often as you can.

In the changeable climate of Chicago, care must be taken against sudden chilling. A thin, soft flannel binder, wound two or three times around the body, will do more to guard against this chilling than the ordinary full dress of frock, vest, skirts, drawers, socks, etc.

This binder should be only wide enough to cover the belly an inch or so above the navel and a couple of inches below. It should be wound smooth and free from creases or folds, and fitted with a few stitches of soft darning cotton—not pinned.

This binder and a napkin are all the dress a baby needs during the heat of the day in the house in summer.

DO NOT LET THE BABY SLEEP IN THE SAME BED WITH ANY OTHER PERSON.—If there is no crib, the mother should put a couple of chairs at her bedside, with any sort of soft covering on them—no feather pillows or hot woolen stuffs—and let the baby sleep there. It will be more comfortable on a summer night than lying against the hot body of its mother, and will not be so apt to disturb or be disturbed.

The backs of the chairs will keep the baby from falling, and the mother can readily reach over to care for it when necessary.

DO NOT DRUG THE BABY. If, after all your care, the baby should fall sick, do not “pour drugs of which you know nothing, into a body of which you know less.”

There is no mother in the city of Chicago that cannot get the best medical treatment for her sick baby without money and without price, if she is unable to pay. Call a doctor instead of spending money for patent medicines, “soothing syrups,” or “cure-alls,” which will probably do your baby more harm than good.

Although this advice is more directly for babies during the first year of life, the sense of it applies quite as well to older children.

Don't overfeed them, and don't let them overfeed themselves.

Don't give them rich food—meats, gravies, pastry, cakes, etc.—nor a great variety. The simpler and plainer the better—plenty of milk, whole wheat bread, oatmeal, baked potatoes, baked apples and fruit of all kinds, in season, ripe and fresh. Roasts and stews and made dishes and—*pie* will come soon enough and so will dyspepsia.

Keep up the daily full bath until it becomes a fixed habit.

Keep them out in the open air as much as possible the whole year round, and send them into the country whenever you can do so, *but only to places where the water is pure.*

If a baby or a child is worth having it is worth saving and more than half the babies and young children that die in Chicago every year could be saved by following the advice here given.

June, 1895.

ANTITOXIN TREATMENT OF DIPHTHERIA.

CIRCULAR OF INFORMATION CONCERNING DIPHTHERIA
ANTITOXIN AND ITS USE IN THE TREATMENT
AND THE PREVENTION OF DIPHTHERIA.

COMPILED BY

F. W. REILLY, M. D., Assistant Commissioner.

(First Edition Published September, 1895.)

The restricted use of Antitoxin in the treatment and the prevention of Diphtheria in Chicago has been attributed chiefly to the high price of the serum and the difficulty of obtaining it. Recent statistics show that its use in other cities has reduced the mortality of diphtheria from one-half to two-thirds during the last year.

In this city the death rate from this disease during the three months ended August 31, 1895, has been almost exactly 53 per cent. of all cases reported*—a mortality rate greatly in excess of the Eastern cities in which the serum is more generally used; in New York, for example, the proportion of deaths to reported cases is only about 16 per cent.

In order to obviate the difficulties which have heretofore prevented a thorough test of the value of the Antitoxin in Chicago, an arrangement has been made by the COMMISSIONER OF HEALTH with the New York Health Department by which he is enabled to make available to the Medical Profession and to all citizens of Chicago who may need it, the Diphtheria Antitoxin Serum prepared by the New York Department in its own laboratories and which has a high reputation for purity and efficiency.

CURATIVE AND PROTECTIVE RESULTS OF THE ANTITOXIN TREATMENT.—At the recent meeting of the British Medical Association, July 30—Aug. 3, 1895, statistics were presented from the hospitals of England, Scotland, Munich, Berlin and New York, showing the reduction of mortality from diphtheria under the use of the antitoxin.

Prof. Dr. Von Ranke, of the University of Munich, stated that the annual mortality from primary diphtheria between 1887 and 1894 had been 48.8 per cent.—the lowest 42.2 per cent. in 1887 and the highest 57 per cent. in 1894.

* Some share of this excessive proportion is, unquestionably, due to the defective notification of cases; but, even with this allowance, the diphtheria death rate in Chicago is much too high.

Since beginning the serum treatment, Sept. 25, 1894, the mortality has been reduced to 17.7 per cent.

The mortality has, therefore, been brought down considerably more than one-half from that of the best ante-serum year, and more than two-thirds from that of the worst.

Prof. Dr. A. Baginsky, of the University of Berlin, reported that during the past year he had treated 525 cases of diphtheria with serum. Previous to the introduction of this form of treatment the mortality had, during four years, averaged 41 per cent., whilst now it is only 16.6 per cent. When the cases come to be examined in detail the improvement is even more striking.

| | Previous mortality, per cent. | Present mortality, per cent. |
|------------------------------|-------------------------------------|------------------------------------|
| Of cases under 2 of age..... | 63.30 | 25.20 |
| 2 to 4 of age..... | 52.85 | 17.12 |
| 4 to 6 of age..... | 37.90 | 17.24 |
| 6 to 8 of age..... | 27.41 | 11.39 |
| 8 to 10 of age..... | 19.35 | 5.11 |
| 10 to 12 of age..... | 15.07 | 10.00 |
| 12 to 13 of age..... | 13.00 | 0.13 |

As to the general condition of the patients, Dr. Baginsky considered that the serum treatment not only reduced the mortality, but that the general condition of the children was improved; that there was very much less danger from heart disease; that there were fewer cases of nephritis; that there was less danger of laryngeal stenosis—no case in his experience ever having had laryngeal obstruction unless this condition had already begun, and that intubation was always possible, whereas under the older treatment tracheotomy was very often necessary.

Similar results are of record as to Vienna, Paris and London—the latest statistics of the *Hôpital des Malades* in Paris, under MM. Roux, Martin and Chaillou, give a mortality rate of only 10 per cent.; while for the German Empire the following facts and figures are summarized from the report of the collective investigation undertaken by the *Deutsche medicinische Wochenschrift*: The observations extended over the period from October 1, 1894, to April 1, 1895. The total number of cases of diphtheria reported was 10 312. Of these 5833 were treated with serum and 4479 without it; the proportion of deaths in the former group was 9.6 per cent., while in the latter it was 14.7 per cent.

In 401 cases of children under the age of two years in which the serum treatment was used early—that is to say, on the first or second day of illness—11.8 per cent. died, the mortality rate under corresponding conditions when serum was not used being 39.7 per cent.

Of 2556 children between two and ten years of age 4.0 per cent. died after timely treatment with serum, the death rate among those not so treated being 15.2 per cent.

Of 696 patients over 10 years of age only 1.0 per cent. died after early treatment with serum, the mortality among the others being 3.7 per cent.

This gives a total death rate of 4.2 per cent. when the serum was used on the first or second day of illness, against a percentage of 14.7 when no serum was used.

When the use of the serum was begun late, that is, after the second day, the mortality at the three age periods already indicated was 34.4, 14.9 and 9.9 respectively, giving an average percentage for the three classes taken together of 16.9 per cent.

As to the United States, Dr. Hermann M. Biggs, Bacteriologist to the New York City Board of Health, recently reported that he has had under his charge between 400 and 500 cases of diphtheria which had been treated with antitoxin in their own homes. These had all been severe cases and the mortality had been slightly over 16 per cent. The mortality for the whole of New York, he added, had been reduced over 40 per cent.

Finally, as to its protective or prophylactic effect : Dr. Biggs dwelt upon the importance of the antitoxin in preventing the spread of the disease by rendering those who were exposed to the infection immune. In one hospital there had been 107 cases of diphtheria, in 108 days ; immunizing injections of the serum were then resorted to with all the inmates—200 units of Behring's preparation being used in each case. During the next thirty days only one very mild case occurred ; in the following thirty days another mild case occurred and then five more. Injections of 225 units were then used and there were no more cases. The same result was obtained in three other institutions and the value of the immunizing power of the antitoxin was conclusively demonstrated.

Dr. Biggs concluded by saying that in over eight hundred subjects treated for the purpose of rendering them immune, he had in no case observed any unfavorable symptoms : in a few cases rashes, apparently urticarial in nature, had occurred on the eighth day, and in some there had been a temporary rise in temperature which, however, had in no case resisted treatment more than twelve hours.

The foregoing facts and figures, which are the latest authoritative utterances of medical science on the subject

of the Roux-Behring discovery, seem to indicate an imperative obligation on the part of those charged with the protection of the public health. During the past ten years diphtheria has carried off nearly ten times as many victims in Chicago as smallpox—notwithstanding the smallpox epidemic of last year. If this constant annual loss of life can be reduced to the same extent that it has been elsewhere by the use of antitoxin, it is as manifestly the duty of the DEPARTMENT to make the effort to that end, as it is its duty to endeavor to reduce smallpox mortality by vaccination. It is with this hope that the present arrangement has been made, and no pains will be spared to enable physicians to fully test the value of the remedy and prophylactic.

While it will be sold at the net cost of production to physicians for use in their paid practice, its gratuitous supply for the treatment of those unable to pay will be limited only by the demand. This gratis distribution must, necessarily, be under strict conditions, so as to prevent abuse and waste and so as to secure the most beneficial results—among which will be the information obtained from the clinical reports of all gratis cases.

Antitoxin will be supplied under the following conditions:

FIRST.—The HEALTH DEPARTMENT will send a Medical Inspector to administer antitoxin upon the request of any attending physician. According to the wishes of the attending physician the Inspector will either follow his directions or will use his own judgment in the injection of the antitoxin. When physicians wish to have the DEPARTMENT Inspector administer the remedy they should telephone the request to the DEPARTMENT (*Main 447, Laboratory*) as early in the day as possible.

SECOND.—The HEALTH DEPARTMENT will furnish antitoxin free to any physician for treatment of a case of diphtheria on a certificate that payment for the remedy would be a hardship to the family, and on condition that he will furnish a specimen of the exudate for bacteriologic investigation, and will, on the completion of his attendance on the case, fill out and send to the DEPARTMENT, on blanks furnished for the purpose, a clinical report of the case. These blanks and the culture outfits for the bacteriologic examination will be found at the stations where the antitoxin is to be obtained.

THIRD.—The CHICAGO HEALTH DEPARTMENT will sell antitoxin to those who can afford to purchase it at the prices paid the New York Department.

ADVICE TO THE FAMILY IN A CASE OF CONTAGIOUS DISEASE.

At the request of many physicians who find it a serious tax upon their time to repeat or write out the necessary instructions for the family in every case of contagious disease they are called on to treat, a circular of advice to the family in a case of contagious disease was prepared by the ASSISTANT COMMISSIONER, which proved so acceptable that upwards of 60 000 copies have been called for since its first issue in September, 1896.

Blank spaces are provided at the head of the circular in which the name and address of the family physician may be written, thereby making the instructions his individual advice to the family—and not as coming from the DEPARTMENT OF HEALTH. If necessary, passages having special reference to the case or to the conditions of the family may be marked; and any shortcomings, modifications or additional instructions—for example, as to care in the use of the corrosive-sublimate tablet, acidulating excreta, or use of some other disinfectant, may be supplied orally by the physician.

In an explanatory note, accompanying a sample copy of the circular sent to every physician, it was further stated that “the services of the DEPARTMENT in disinfection may be commanded by the family physician in his discretion. The disinfecting van furnishes a temperature of 380° F.—sufficient to thoroughly sterilize mattresses, pillows, blankets or woollen material, too valuable to be destroyed. No charge is made for disinfection, sulphur fumigation, etc. It is preferred, however, that this service be requested by the physician direct, or through the family by his authority. It is only in cases where the physician declines to assume the responsibility of securing precautions against the spread of contagion and infection that the DEPARTMENT takes the initiative.”

The text of the circular is as follows :

ADVICE OF THE FAMILY PHYSICIAN IN A CASE OF CONTAGIOUS DISEASE FURNISHED TO.

By Dr. _____

Address _____

In any case of contagious disease the patient should be placed in a room apart from the rooms occupied by other members of the family. Where it is possible the adjoining room, between the sick-room and other rooms on the same floor, should be completely emptied and its doors and windows kept open as much as practicable.

The sick-room should be large, easily aired and have a good sunlight exposure. The patient must have plenty of fresh air night and day. Sunshine and fresh air are potent remedial agencies in any contagious disease. If possible, when the weather is too cool for open windows, heat the room with an open fire. If there is a fire-place have a fire in it, even if other heat must be used. A stove makes the worst kind of heat for the sick-room. If it must be used keep a pan or kettle of water on it. Place the bed near the center of the room without letting the air blow directly on the patient.

If the room connects with others which must be occupied lock all the doors, but one for exit and entrance, and fasten to their frames—top and sides—sheets of cheap cotton cloth, kept wet with a disinfecting fluid. These sheets must be long enough to allow two or three inches to lie on the floor. This will prevent the contagion from getting into the adjoining rooms through the crevices of the doors. Over the door to be used, the sheet on the outside must not be tacked at the bottom nor along the full length of the lock-side of the frame, but about five feet may be left free to be pushed aside; this sheet must also be long enough to lie in folds on the floor and must be kept wet with the disinfectant.

No article of furniture—carpets, rugs, curtains, ornaments, books, etc.—except the things actually necessary for the care and comfort of the patient should be left in the sick-room. Exclude cats, dogs and other pets, including birds, from the room, since these are liable to contract and carry some of the contagious diseases.

No person except the strictly necessary attendants should be allowed to enter the sick-room. These should wear only such clothing as can be washed in boiling water; especially avoid garments made of rough woolen material. The hands should be rinsed in a disinfecting fluid immediately after every attention to the patient. The attendants should avoid inhaling the patient's breath; and in case of diphtheria or croup, if the patient coughs in the attendant's face she should notify the physician as soon as practicable.

The floor of the sick-room *must not be dry-swept*. If it becomes necessary to sweep, first sprinkle the floor thoroughly with tea-leaves or sawdust wet with a strong disinfectant—and *burn the sweepings at once*. Instead of sweeping, it is better to go over the floor with a mop or cloth wrung out of the disinfectant. And instead of dusting, all accessible surfaces—as of doors, wainscots, window frames and ledges, tables, chairs, the exposed parts of the bed-frame—should be wiped off at least once a day, door-knobs oftener, with a cloth dampened with the disinfectant.

All dishes and table utensils used in the sick-room must be washed in boiling water or rinsed in a disinfecting fluid before being taken from the room. Boiling water is entirely sufficient and is preferable, on account of the usual disinfecting fluid being highly poisonous and tarnishing silver-ware.

A sufficient quantity of a good disinfectant should be kept in the sick room in a wooden pail, slop jar or other vessel—*not metal*—and into this all towels, napkins, handkerchiefs, pillow-slips, sheets, etc., and all articles of clothing used in the room, must be dipped and wrung out before removal. They should be taken to the laundry while still wet and there be thoroughly boiled before they dry.

A good disinfecting fluid is readily made by dissolving a corrosive-sublimate tablet in warm water. The tablets should be procured only on the physician's prescription, and used strictly as he directs. The fluid is poisonous if swallowed.

A 15-grain tablet, containing between 7 and 8 grains of corrosive sublimate, will make a pint of *strong* disinfecting fluid, useful for most purposes. Half this strength—one tablet to a quart of water—is sufficient for wetting the door sheets and for washing the hands.

The night vessel should be kept one-third full of the *strong* fluid, to be emptied not sooner than half an hour after each use, and then immediately resupplied with fresh fluid. All discharges should be disinfected in this way before being emptied into water-closets or otherwise disposed of. This is especially important in typhoid fever.

In diphtheria, scarlet fever, membranous croup, measles, or whooping cough—all discharges from the mouth and nose should be received upon pieces of old cotton or linen, worn handkerchiefs, etc., and *burned at once*. Do not allow a cuspidor or other spit-vessel to be used in the sick-room, and

especially do not allow the patient to spit on the floor. If this should accidentally happen, wash the place immediately with the *strong* disinfectant.

When the case is ended soak all sheets, pillow-slips, towels and other washable articles in the room, in the *strong* disinfectant and remove them while wet to the laundry, to be boiled at least thirty minutes. Sprinkle thoroughly all surfaces of pillows and of the mattress with the *strong* disinfectant and then carry into the open air, to be exposed to sunshine for at least six hours—frequently turning the articles. Mattresses and pillows should be burned or sterilized by heat if soiled by discharges from the patient. Consult the physician on this point.

Wash the floor and all wood-work, first, with the *strong* disinfectant and immediately after with hot water and German green soap—to be had at the drug store. Treat the furniture in the same way. Brush the ceiling and walls thoroughly with the disinfectant and then re-paper or calcimine, after two or three days' exposure by open doors and windows. Do not neglect closets, shelves, ledges, cornices, or other surfaces on which dust may settle.

If the above advice is carefully followed there will be no necessity for fumigating the rooms with sulphur.

The objects of this advice are two-fold: First, to facilitate the recovery of the patient. Second, to prevent other members of the family from contracting the disease.

It is confidently believed that both these ends will be attained wherever these instructions are faithfully carried out.



SOUTH END OF MEN'S WARD: CITY ISOLATION HOSPITAL.

Hospitals: Report of the Inspector in Charge.

GEORGE C. HUNT, M. D., *Medical Inspector.*

THE first smallpox hospital in Chicago was erected in 1856 on a piece of ground in what is now Lincoln Park. Its capacity was small—twelve patients—only those who were too poor to afford a physician being taken there, the better classes being quarantined in their own homes. At the close of the war in 1865 the main building was enlarged to two stories and two one-story wings were added, about quadrupling the capacity of the building. The “great fire” of 1871 wiped out this building, and in the spring of 1872 another two-story frame building was erected on the same site. This was again destroyed by fire a few months later, and that fall the erection of a brick building, 30 by 150 feet, and two stories in height, was begun on the city property at Twenty-sixth street and Sacramento avenue. This was completed in the following spring and was sufficient for the city’s requirements until the epidemic of 1881 to 1883. In 1882 a frame wing was added. After the cessation of the pest in 1883 a long period of almost absolute immunity from smallpox ensued until, in 1894, the great epidemic assumed such proportions that, at first, a large T-shaped one-story frame structure was added, and then an overflow frame building two stories in height was constructed at Ogden avenue and Forty-fourth street.

For nearly a score of years every COMMISSIONER OF HEALTH had urged the construction of a “safe and proper” hospital for the reception and treatment of smallpox patients; but it remained for Dr. REYNOLDS, COMMISSIONER,

during this epidemic, to effectively denounce what he termed in his Annual Report for 1894, "the criminally inadequate hospital facilities and unsafe condition of the old hospital structure," and to so arouse public sentiment that the City Council finally took action on the subject. Through Dr. REYNOLDS' indefatigable exertions in the face of bitter opposition to every proposed location on the part of residents and property owners, a piece of ground at Thirty-fifth street and Lawndale avenue was purchased, the site of the present building, and plans were formulated for a new building which have resulted in an isolation hospital that is perfect in its appointments and the equal of any modern hospital either in this country or in Europe.

To those of us who were in attendance at or who had occasion to visit the old "pest-house" the change is little short of miraculous. With the destruction of the old small-pox hospital by fire December 1, 1896, was terminated one of the horrors of the nineteenth century. And yet, we may thank God that things were no worse. In the fall and winter of 1893 the old building was so crowded that every available spot of room in main building, barracks and tents was occupied, and new patients had to be laid on the floor in the halls and passage-ways, whilst the attendants shuffled along sideways in an endeavor to find room to step. Two hydrants in the main building and three in the wooden additions furnished the water supply. The only means of illumination were kerosene lamps, which were within the reach of every delirious patient, and were not even guarded by a wire protection until late in the year. Ordinary coal stoves, also unprotected, gave an unequal and variable heat. It is only owing to the goodness of Providence and the untiring watchfulness of the Sisters, who were the nurses, that a terrible catastrophe did not occur.



CHILDREN'S WARD: CITY ISOLATION HOSPITAL.

THE NEW CITY ISOLATION HOSPITAL.

In June, 1895, the original hospital plans were submitted to a committee of experts, composed of Dr. JOHN B. HAMILTON, Consulting Hygienist of the DEPARTMENT, Chairman; Dr. A. C. COTTON, City Physician; Dr. E. GARROTT, Chief of the Division of Contagious Diseases, and the ASSISTANT COMMISSIONER, Dr. F. W. REILLY. Under instructions their labors resulted in a modification of the original design, which effected a material reduction in the estimated cost—this reduction being deemed necessary on account of the straitened financial condition of the city.

As shown by the frontispiece and the accompanying plans and illustrations, the new hospital occupies a block 600 feet square, bounded by Thirth-fourth street, Lawndale avenue, Thirty-fifth street and Hamlin avenue. The grounds are inclosed by an iron fence six feet high.

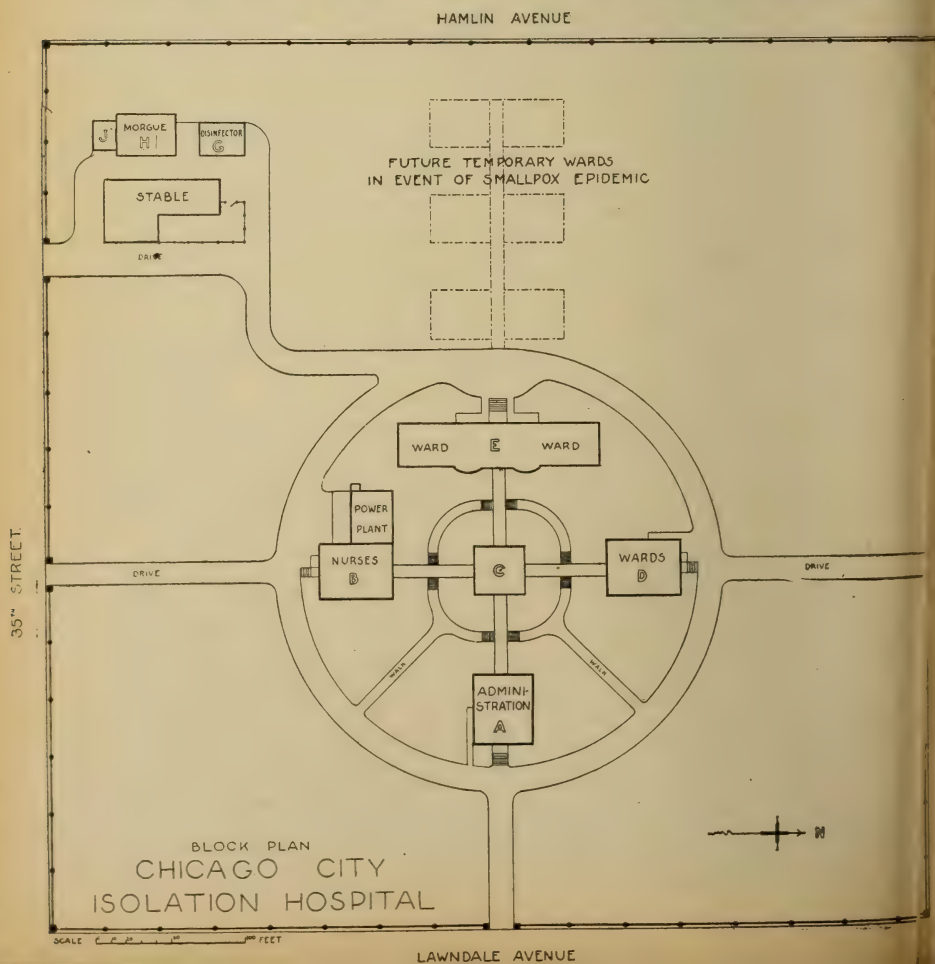
In planning the institution the idea worked upon was to provide a hospital which would have a normal capacity of about 50 contagious-disease patients, but which should have such administration accommodations for physicians and nurses and such kitchen, laundry, heating and lighting facilities that nothing would be required, in the event of an epidemic, save the speedy erection of temporary wards to expand the capacity to 500 or 600 patients; as many of these wards as may be necessary can be added whenever required, and are provided for in the plan adopted.

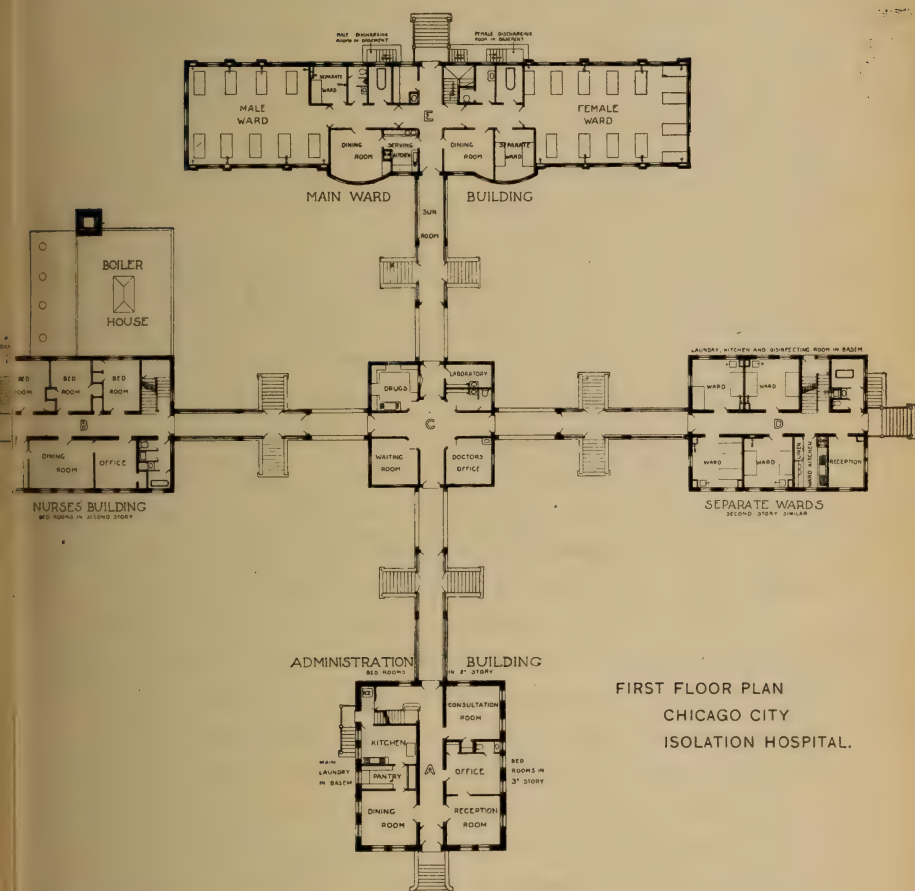
The construction of the main hospital buildings, constituting the administrative part of the hospital, is substantial and permanent. The foundations are stone, the upper walls brick, the roofs tile, and the floors steel beam and hollow tile arch construction. The walls and ceilings are hard plaster, painted; the flooring is hard maple, with marble floors in bath rooms, etc., and the interior finish is oak.

The corners and angles of plastering and trimmings are rounded and made smooth, to afford as few lodging places as possible for dust and microbes.

Referring to the plans it will be seen that building "A," the administration building, has living, sleeping and office accommodations for physicians and male nurses; also sleeping rooms for attendants. The basement contains a steam laundry, with a brass washer and disinfector, extractor, mangle, tubs, drying coils and ironing room.

Building "B" is the nurses' headquarters. The main kitchen, supplied with steam-cooking apparatus, cold-storage rooms, etc., is in the basement. Food is carried through the





FIRST FLOOR PLAN
CHICAGO CITY
ISOLATION HOSPITAL.

basement corridors on dumb waiters to the ward buildings. These basement corridors serve also for runways for water and steam pipes, electric wires, etc.

The main group of buildings is heated by steam throughout from the central plant in boiler house, next to building "B." Hot water and electric light are supplied from the same source. In this connection it may be noted that the ward buildings are heated by an indirect steam coil and air-duct system which supplies fresh air constantly and is regulated as to temperature by automatic control.

Building "C" contains the dispensary, laboratory, quarters for physicians on duty, and toilet rooms.

Building "D" is a complete hospital in itself; and with its separate wards, was intended, in the event of the whole institution being needed for smallpox patients, to become a detention building, where doubtful cases could be cared for until a positive diagnosis may be made.

Building "E" is the main ward building, and is divided into separate wards for men and women, the wards for men occupying the south half and those for women the north half of the building. When convalescents are ready to be discharged they descend to the basement, receive a medicated bath, step into an adjoining room, where their disinfected clothing awaits them, and then go directly outdoors without danger of re-infection or of carrying contagion away with them or their belongings.

Building "F" contains stalls for fourteen horses, carriage rooms for ambulances, hearse, etc., sleeping and bath rooms for drivers and employes and rooms for hay and grain storage. This building is heated from the boiler which supplies steam to the disinfecting chamber in Building "C."

Building "G" is the disinfector, divided into two parts by a brick partition, the only communication being through a double-shell steel cylinder, which is built into the partition. Clothing, on galvanized iron racks, can be rolled into one end of the five-foot cylinder, disinfected either by dry heat or by direct steam, and then taken out in the other half of the building, where storage space, with lockers, shelves, etc., is provided for a large amount of clothing.

Building "H" is the morgue. It has cement floors, and the walls and ceiling are of Portland cement on metal lath. Light and ventilation are from the roof, and every opening is covered with fine copper gauze screening. Special facilities for post mortem examinations are provided.



PRIVATE WARD: CITY ISOLATION HOSPITAL.

A small carriage house, "J," adjoining Building "H," accommodates the portable disinfector or steam disinfecting van, which is driven to any part of the city as occasion requires, to disinfect clothing and bedding.

The buildings are large and well lighted, and their appointments perfect. Every arrangement for safety and comfort is complete, no detail is lacking, and the unfortunate sufferer from a contagious disease need no longer dread the "pest house," but is now assured of facilities for his care and treatment in the new City Isolation Hospital which no private dwelling can furnish.

HOSPITALS INSPECTION.

On May 26, 1896, an amended ordinance licensing hospitals in the City of Chicago, and placing them under the supervision of the HEALTH DEPARTMENT, was passed by the City Council.

On taking charge of this Bureau an endeavor, as far as practicable, was made to secure a list of the public and private hospitals in the city, and these were notified to take out the license prescribed. Institutions conducted for charitable purposes only, were, by order of the COMMISSIONER OF HEALTH, exempted from the license fee.

The roster showed 104 hospitals being conducted in the city limits; of these, 18 were exempt under the ruling of the COMMISSIONER; 27 discontinued business—all but one of these being private lying-in hospitals—against the abuse of which the ordinance was chiefly directed. Five hospitals have not as yet taken out their licenses; four are exempt under the provisions of the ordinance (U. S. Marine, State Charitable Eye and Ear, Cook County and City Isolation), and 60 have taken out licenses as required.

The cases of those not taking out their licenses as required, have been referred to the DEPARTMENT Attorney, and are now in his hands for prosecution.

Reports received from all hospitals during the year show the following results:

| | | |
|--|------|------|
| Patients remaining from previous year..... | 4032 | |
| Admitted during year | 4463 | |
| | | 8495 |
| Discharged during year..... | 4047 | |
| Died during year | 281 | |
| Remaining at end of year..... | 4167 | |
| Totals..... | | 8495 |

Following is a list of the principal hospitals, their locations, character and number of beds in each:

| NAME. | LOCATION. | CHARACTER. | Number of Beds. |
|---------------------------|---------------------------------|----------------------|-----------------|
| Presbyterian | Wood and Congress sts.. | General | 250 |
| St. Elizabeth's..... | Davis and Le Moynes sts.. | General | 250 |
| Mercy | 26th st. and Calumet ave. | General | 200 |
| Alexian Brothers | 559 Orleans st | Males only | 165 |
| Hahnemann | 2814 Groveland ave | General | 160 |
| St. Mary's..... | 258 W. Division st | General | 150 |
| St. Joseph's..... | 360 Garfield ave | General | 150 |
| St. Luke's..... | 1420 Indiana ave | General | 150 |
| West Side..... | 819 W. Harrison st | General | 125 |
| Augustana | 480 Cleveland ave | General | 125 |
| Michael Reese | 29th and Groveland Park ave .. | General | 110 |
| Chicago Policlinic | 174 Chicago ave | General | 100 |
| Chicago Baptist..... | 3416 Rhodes ave | General | 100 |
| Post Graduate | 2400 Dearborn st | General | 100 |
| Mary Thompson | Paulina and Adams sts.. | Women and Children.. | 80 |
| German | 754 N. Larrabee st..... | General | 80 |
| St. Agnes' | 693 S. Halsted st | General | 70 |
| Passavant Memorial..... | 192 E. Superior st..... | General | 66 |
| Woman's..... | Rhodes ave. and 32d st .. | Gynecologic | 65 |
| Chicago | 452 E. 49th st | General | 50 |
| Norwegian Lutheran | Francisco and Thomas sts | General | 45 |
| Lakeside | 4147 Lake ave | Surgical | 45 |
| German American..... | 30 and 32 Belden place .. | General | 40 |
| Willie Hipp | 1211 E. 56th st | General | 40 |
| Englewood Union..... | 830 65th st | General | 40 |
| Provident | 36th and Dearborn sts .. | General | 38 |
| Bethany Home..... | Paulina st. and Winnemac ave .. | General | 35 |
| Wesley | 25th and Dearborn sts .. | General | 35 |
| Chicago Homeopathic | 354 S. Wood st | General | 30 |



| NAME. | LOCATION. | CHARACTER. | Number of Beds. |
|--|--------------------------|-------------------|-----------------|
| Maurice Porter | 606 Fullerton ave. | Pediatric..... | 30 |
| Chicago Branch of Battle Creek Sanitarium .. | 28 College place | General | 30 |
| Garfield Park Sanitarium | 1774 Washington blvd.... | General | 25 |
| Streeter's | 2646 Calumet ave. | Gynecologic | 25 |
| Chicago Charity | 2407 Dearborn st | General | 25 |
| Luella Day | 594 W. Van Buren st.... | General | 25 |
| Pratt Sanitarium..... | 1732 Diversey ave..... | Surgical..... | 20 |
| Marion Sims..... | 518 W. Adams st | General | 20 |
| Bennett | 78 N. Ada st | General | 20 |
| Thompson Sanitarium..... | 805 W. Monroe st | Alcoholism..... | 20 |
| Linnæan | 233 W. Division st | General | 12 |
| Private | 2807 Wentworth ave..... | General | 12 |
| Hyde Park Sanitarium | 5504 Everett ave | General | 10 |
| Sanitarium for Women and Children | 823 N. Clark st | General | 10 |
| Zwingli's Sanitarium..... | 547 W. Diversey ave | Hydropathic | 10 |
| Private..... | 3118 Wabash ave..... | Gynecologic .. . | 10 |
| Metropolitan Sanitarium..... | 5854 Cornell ave..... | Eye and Ear | 5 |
| Rest Cure | 1823 Wrightwood ave ... | Nervous diseases. | 5 |

To these 47 institutions, with their 3216 beds, are to be added the Cook County and the City Isolation Hospitals, with a capacity of 1150 patients; and 13 lying-in hospitals, with 96 beds—making an aggregate of 62 institutions and some 4500 beds capacity.

THE HOSPITAL AND AMBULANCE SYSTEM OF CHICAGO.

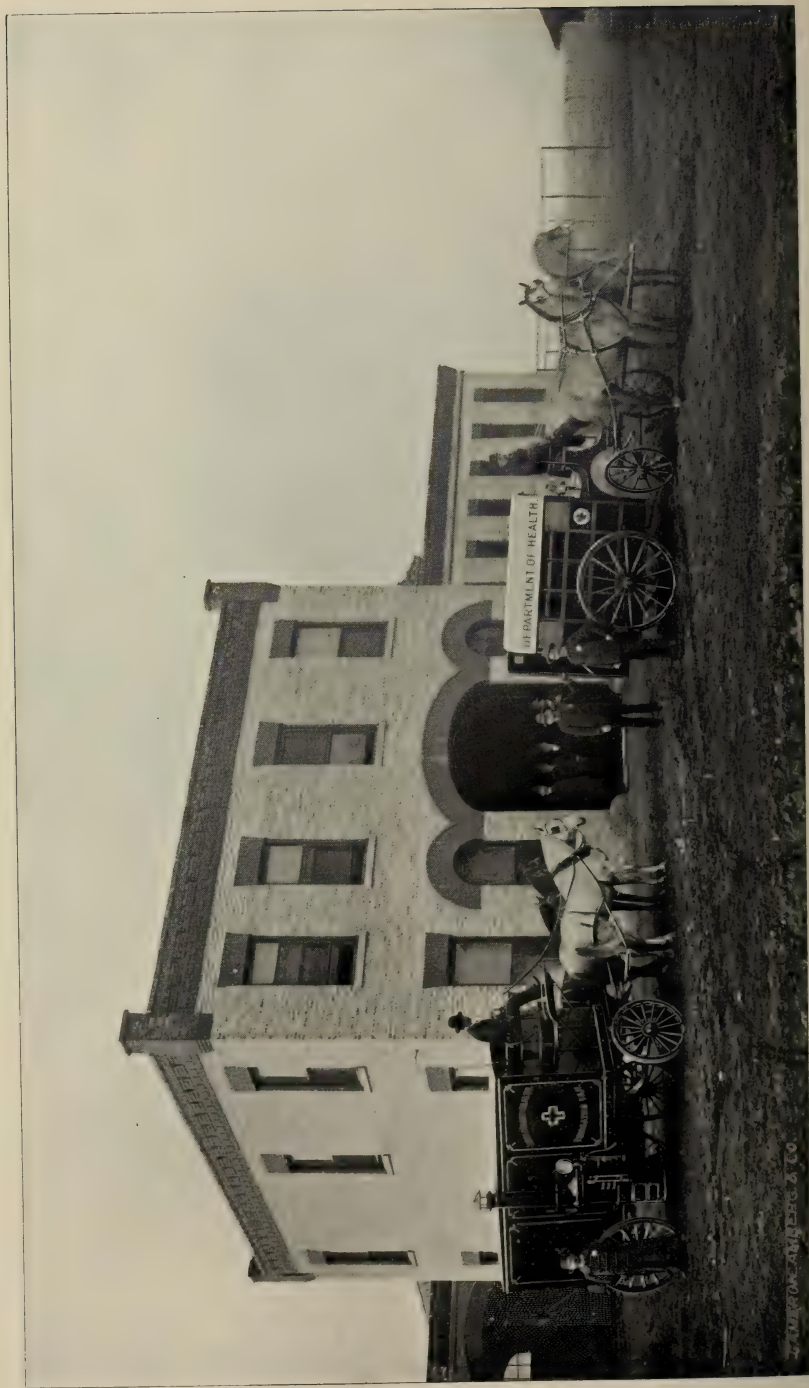
BY LOUIS J. MITCHELL, M. D.

IS THE present hospital and ambulance system of Chicago satisfactory? If not, what criticisms may be made as to its efficiency?

First, as to the number of beds available in hospitals, there are some two dozen public and semi-public hospitals in Chicago, with an aggregate capacity in round numbers of 3500 beds, about 2.20 beds per 1000 inhabitants.* Berlin, with about the same population, has 3.85 beds per 1000, a much larger proportion. However, no complaint is heard as to overcrowding, save in the case of the County Hospital.

This institution is not only *the* charitable hospital of the city, but is the largest by far, having a capacity of 1000 patients. The growth of the institution has not kept pace with the growth of the city, so its capacity is often severely taxed, especially in the winter time. Patients are found here who properly belong elsewhere; for instance, cooks, stewards, etc., on the lake boats, who should be cared for at the U. S. Marine Hospital. Notwithstanding strenuous efforts to keep the admissions down to the proper limit of capacity, the beds are often all full and convalescent patients or those afflicted with minor ailments have to sleep on the floor. The other institutions, being principally for pay patients, are not so subject to overcrowding. If this is threatened, and their beds are full, they have merely to direct applicants to similar institutions elsewhere.

* Strictly private hospitals are not included in this enumeration.



AMBULANCE BARN AND STABLES: CITY ISOLATION HOSPITAL.

The problem of how to deal with cases of diphtheria, scarlet fever, measles and the like in charity cases—a serious question a few years ago—has been partially solved by setting apart a ward in the pavilion recently erected at the County Hospital for the reception of these patients. These accommodations being limited it seems wise to use for this purpose the new Isolation Hospital belonging to the city, and which has a capacity of 50 beds. This has been done during the past winter, and since the prospect is that smallpox will not assume any alarming proportions, with vaccination thoroughly carried out as it now is, the plant may well be used for the reception of cases of the other contagious diseases instead of allowing it to remain idle.

In the way of special hospitals there is urgent and growing need for a public lying-in hospital. It is little short of criminal to receive parturient women under the same roof with all classes of patients, many of them pus cases. Yet this practice exists in several hospitals in the city, and while the obstetrical ward is isolated, yet the practice is to be decried. In the spasms of economy with which the Board of County Commissioners is periodically afflicted, it is proposed to do away with the obstetrical ward of the County Hospital entirely. This would necessitate the majority of charity patients being sent to the "poor-house" at Dunning, to have their children born within its walls—something to be regretted from a sociologic standpoint. A small beginning toward a Public Maternity Hospital has been made under private auspices, and it is to be hoped will prove the nucleus of a large institution worthy the city and age.

It would seem as if a "lock" hospital or some other provision for venereal cases should be made. Let us take cases of inguinal adenitis; these are exceedingly painful and nearly inhibit locomotion. Individuals suffering from this and other forms of venereal disease need hospital treatment

and rest; yet are debarred from it, if charity patients, and sent to that limbo for all ills, the "poor-house."

A hospital for the reception and treatment of acute cases of insanity is also urgently needed. For cases of acute alcoholism and delirium tremens the only resource at present is the police station. The County refuses to receive them at the Detention Hospital, claiming that as the city receives the money from saloon licenses it should take care of the product of the saloon. Patients with acute mania or temporary mental aberration could be cared for in such an institution without the necessity of going through the formalities of the insane court.

As to the location of the hospitals, most of them are in the older parts of the city, consequently near the lake. The nearest hospital to the court house is a mile away; the County Hospital, receiving the majority of the cases of violence and accident, is two and one-half miles distant. A small hospital in the heart of the city would be useful for accident cases. Attempts at founding such an institution under private auspices have failed, owing to the unwillingness of the police to take cases to them.

The changes in the hospital facilities of late years are best shown by a comparison of the cases admitted to the County Hospital now with those of a decade ago. Formerly cases of railroad and other accidents, gun-shot wounds, etc., were taken to the hospital from distances of four to five miles. At the present time, owing to the establishment of small hospitals under the control of religious and other bodies, and which take such cases, it is often possible to find hospital accommodations within a mile or two, in many cases to the great benefit of patients.

Concerning the ambulance system: The city owns two ambulances, stationed at the Isolation Hospital, besides six at various police stations; and in addition, the covered police patrol wagons (over two dozen), are ambulances for all practical purposes. Some seven or eight ambulances are owned by as many hospitals, and there are one or two belonging to private corporations. The city's vehicles are well scattered over the city geographically.

The great defect of the ambulance service is the lack of trained surgical assistants to accompany the vehicles. It sometimes happens that a physician in the vicinity of the police station or a senior medical student can be obtained; as a rule, however, no assistance of this character is at hand. In Berlin this is overcome by training the police to ambulance work. A "Samaritan" is always present at each police station and nearly two thousand men have been trained. There are "Samaritans" in the fire brigades also.

In Chicago there is no such competition for accident cases as that in New York, where we read in the *Medical Record*:

"The competition for accident cases has become so active among ambulance surgeons that it has become necessary to establish rules of precedence at fires. These rules provide that whenever a general ambulance call is made for a disaster, explosion, collapse of building or a fire of unusual proportions, the surgeon first reaching an injured person shall be considered in charge of the case. If surgeons from different hospitals reach the case at the same time the one from the nearest hospital shall take it."

It is needless to point out the many lines of usefulness of ambulance surgeons, *e. g.*, in controlling hemorrhage, in administering antidotes in poisoning cases, in cases of insolation, etc. Another direction in which the ambulance surgeons may give useful service is in correcting the police

diagnosis of "drunk or stupid." For some inscrutable reason all persons found on the street comatose, either with or without the smell of alcohol on their breath, are judged by the police to be drunk, and locked up as such. In a few hours they are often found dead, when post-mortem examination reveals a fractured skull and cerebral hemorrhage. For example: J. M., 31 years old; locked up for alcoholism, found dead in cell. On post-mortem a depressed area in skull, five square inches, with large extra-dural clots, was found. The writer has noticed similar cases frequently during his service as Coroner's Physician.

When, if ever, the ambulances are provided with medicine chests and materials for "first aid," and manned with surgeons, the control of the public ambulance system should be vested in the DEPARTMENT OF HEALTH. In New York City the Commissioners of Charities and Corrections control the ambulances connected with the public and municipal hospitals; the Police Department merely allot the cases from which private hospitals may receive charity cases.

Report of the Municipal Laboratory: 1895-6.

ADOLPH GEHRMANN, M. D., DIRECTOR AND BACTERIOLOGIST.

CASS L. KENNICOTT, F. C. S., CHEMIST.

THE Laboratory of the DEPARTMENT had its origin under an ordinance creating a Bureau of Milk Inspection, passed November 21, 1892. This ordinance was enacted owing to a popular agitation of the subject of pure milk brought about by a series of analyses that were made, and by a number of newspaper articles showing to the public that adulterations and sophistications of milk had existed in the city. During December of that year, PROF. E. B. STUART was appointed by MAYOR WASHBURN as Deputy Commissioner of Health in charge of the Bureau, and he immediately began its organization. MR. CASS L. KENNICOTT and PROF. J. H. SALISBURY were selected as chemists and DR. ADOLPH GEHRMANN as microscopist. These persons were his scientific assistants, and seven inspectors were selected by examination to fill the positions of sample collectors. A definite plan of procedure was decided upon and the collection of samples was begun. The first series of analyses that were made showed that but five to ten per cent. of the samples so obtained were in accordance with the requirements of the ordinance as passed. The chief faults were found to be insufficient fat in the milk, owing to extreme skimming, and the addition of coloring matter.

During January, 1893, PROF. STUART and DR. GEHRMANN visited Boston, New York and other eastern cities to obtain additional information for the collection of samples and for the prosecution of offenders. The analytical laboratory at

this time was in PROF. STUART'S drug store, Thirty-ninth street and Cottage Grove avenue, there being a small place in the rear of the store for this purpose. PROF. SALISBURY conducted his analyses in the laboratory of the Woman's Medical College, Lincoln and West Harrison streets. This arrangement was continued during 1893.

On September 18, 1893, a supplementary ordinance was passed by the City Council, that had for its principal objects the bringing of the Bureau of Milk Inspection under the immediate control of the COMMISSIONER OF HEALTH, and assigning the duties of the Deputy Commissioner of Health to him, and the creation of a laboratory for the DEPARTMENT in which analyses of milk, water, ice, and all food stuffs should be made and other inspections carried out, as might be deemed advisable. During January, 1894, room was obtained in the City Hall and the laboratory was equipped from supplies already on hand, and such additional apparatus and fittings as were needed at that time.

Beginning in February, analyses were made here regularly. DR. GEHRMANN was appointed as Superintendent and MR. KENNICOTT as Assistant. During 1894 an extended series of analyses of city water was made. This series included 239 sanitary analyses. From the first, numbers of analyses of food products, drugs, etc., were made up to the limits of time, there being but three persons working in the laboratory during this year. Many of these samples were received from private persons making complaint in regard to purchases from dealers. In October the bacteriologic diagnosis of diphtheria was undertaken for physicians, and has since grown to be a very considerable part of the bacteriologic work. The work was continued in this manner during 1894.

An incident of some importance occurred in connection with the appropriation allowance for 1895. Opposition,

especially to the enforcement of milk inspection, had been developing for some time, and culminated in an attempt to show that the work was of no value and that the DEPARTMENT had not enforced the license regulation. The appropriation was lost, but owing to an energetic appeal from the COMMISSIONER OF HEALTH, DR. ARTHUR R. REYNOLDS, the Council allowed the item of appropriation for the year.

During 1895 and 1896 the work has greatly increased and has been much improved. More subjects have been introduced and more help has been granted. The inspection of ice was begun in June, 1895, under an ordinance passed April 15, 1895. A systematic examination of vaccine used by the DEPARTMENT was begun in July, 1895. A more stringent enforcement of the milk ordinance was begun in August of that year. An additional room for laboratory work was obtained and equipped for chemical analyses. During October, 1896, the bacteriologic diagnosis of typhoid fever for physicians was begun, and the bacteriologic laboratory was equipped with additional apparatus and fittings.

November 6, 1896, the inspection of meat was placed in charge of the laboratory and has necessitated much additional work. The meat inspectors have found that the technical help of the laboratory is of great value to them and have constantly made use of it in settling disputed questions, incidentally causing considerable extra time and work to be given to this subject by the laboratory force.

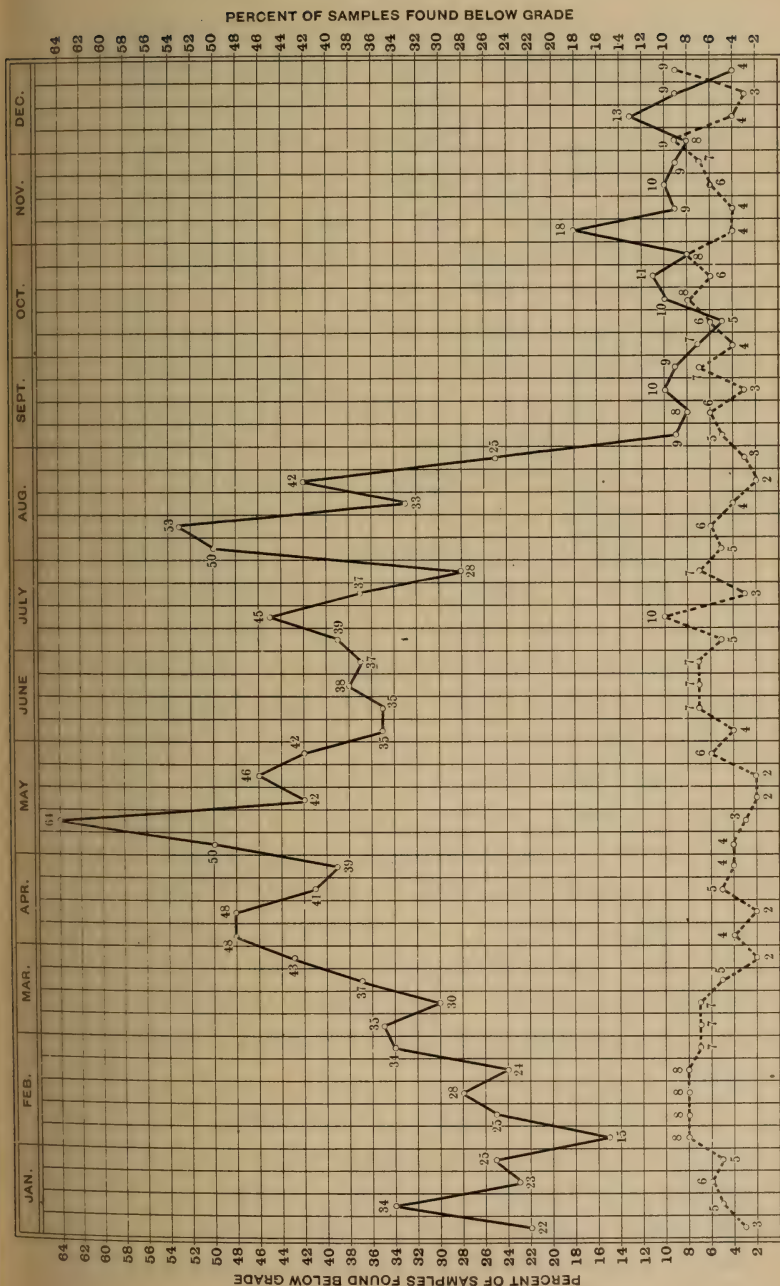
The equipment of the laboratory is now so complete that almost every line of investigation can be undertaken at once. It is highly desirable, however, that the laboratory be given more floor space, as the small rooms now occupied are overcrowded; while the need of scientific assistance is being more and more felt because of the constantly increasing number of samples and specimens received and the analyses demanded.

MILK INSPECTION.

CASS L. KENNICOTT, F. C. S., CITY CHEMIST, IN CHARGE OF
MILK INSPECTION.

THE City of Chicago is situated in one of the finest dairy districts in the world, whose broad plains and fertile valleys are justly famous for their luxuriant pastures, cool springs and fine cattle. Notwithstanding these favorable conditions previous to the instituting of what was popularly known as the "milk crusade" the milk supply of Chicago was of an inferior quality. The COMMISSIONER OF HEALTH, realizing the great menace to public health of adulterated and unclean milk, issued instructions during the latter part of August, 1895, ordering the entire force of the laboratory to bend every energy toward improving the milk supply and to vigorously prosecute all dealers selling milk or cream not in accordance with the milk ordinance. The number of samples collected and analyzed was at once increased and vigorous prosecution of offenders reduced the number of samples below grade from 60 per cent. to 5 per cent. in a few weeks. This is shown in a graphic manner by the accompanying chart, the vertical lines representing periods of a week, while the horizontal lines represent the per cent. of samples below grade.

The use of coloring in milk or cream, although much improving its appearance, has been shown by recent scientific investigation to seriously interfere with the pancreatic and peptic digestion. This practice was very common, in fact, almost universal, but is now a thing of the past. The skimming of milk, and more particularly the partial skimming, or removing of the top quart of cream from each can, was practiced by the majority of milk dealers, and, in fact, this "top quart" evil is not yet entirely suppressed. The removal of the top quart from a can of milk



Continuous line shows percentage of samples of milk and cream found "below grade," by weeks, during 1895.
 Broken line shows the same for 1896.

Found "below grade" January 1, to August 31, 1895, average 34 per cent.
 During rest of year average 9 per cent.
 Found "below grade" during 1896, average of 35 000 samples, 5.2 per cent.
 Rigid enforcement of Milk Ordinance begun latter part of August, 1895.

is, if anything, more objectionable than entire skimming, not only from the fact that this skimming unbalances a perfect food, and from this point of view is more objectionable than watering, for a housekeeper, although able to tell milk from which all of the cream has been skimmed, cannot tell partially skimmed milk without the aid of an analysis. Over 14 000 samples of milk were examined in 1895. This number was increased to over 25 000 in 1896.

The system of collecting and testing samples adopted by the municipal laboratory is as follows: Six milk inspectors are employed who are assigned to certain districts, these districts being changed every few days. The inspectors are simply collectors of samples and make no analyses themselves, all testing being done in the laboratory. The DEPARTMENT is not in sympathy with any method of inspection where a simple hydrometer test done on the street corner practically allows all but the very poorest quality of skimmed or watered milk to pass inspection. Samples are collected in half-pint bottles, each bearing a number which has never been used before and is never used again. A complete record of the circumstances of taking the sample is made by the inspector and a duplicate of this record is given to the milk dealer, thus giving him an opportunity to make objection to any part of the record while the conversation or circumstances are fresh in the memory of both the inspector and the milk dealer. If the milk dealer so requests a duplicate sample is given under seal, and he may have it tested by another chemist if he so chooses.

It is to the credit of the DEPARTMENT that in no instance in the hundreds of cases tried in court has the analysis been disputed by competent evidence. The milk inspectors carry their samples in a case holding 24 bottles. The case is furnished with a lock and key, and inspectors

are instructed under no circumstances to allow the case containing the samples to be out of their possession between the time of collection and delivery at the laboratory. Inspectors, upon arrival at the laboratory, register, giving the time of day that the samples are delivered and the districts in which they were taken. This has been found necessary in case prosecution is brought upon any of the samples collected.

The samples are then tested by an assistant who does not know from whom the samples have been taken, all reports being made by number. Samples shown by the assistant's test to be below grade or in any way of a suspicious character are set aside and a second analysis is then made by the Chief Chemist. Thus all samples upon which prosecution has been brought are analyzed in duplicate.

Vigorous prosecution and publication of the names of dealers has shown its effect, not only upon the dealers themselves but upon the farmers who supply them, as milk dealers, fearing that the milk which they receive from the farmer may not pass test, bring to the laboratory milk taken from can immediately upon arrival at the depot. In cases where this milk is found wanting in any particular, the dealer has stopped taking milk from this farmer and thus the farmer is induced to make every effort to supply good milk. It has been repeatedly held in the courts that a milk shipper who has delivered milk below grade to a milk dealer cannot recover in a suit for payment.

Every analysis of milk made represents a sanitary inspection of the premises where the sample was taken as well as an examination into the quality of the milk, inspectors being instructed to report any cases where depots or wagons are not kept in a good sanitary condition. Moreover, special sanitary inspections are made whenever the circumstances seem to warrant.

Some of the difficulties of carrying out sanitary inspections in connection with contagious diseases in milk depots may be illustrated by the following case :

It has been the rule of the laboratory to look over the daily list of contagious diseases reported and to see whether any of them are in milk depots or not ; but as some of the patients, although they are in the same house where the milkman's family is, are of a different name, and the street number is sometimes different from that on record in the office, the exact location of the case cannot always be determined, and sometimes because of the great distance from the central part of the city they escape the usual rounds of the milk inspector until some circumstance brings them to the attention of the DEPARTMENT, as, for instance, a death. The case in question was investigated by one of the DEPARTMENT Medical Inspectors who returned the following report. A milk inspector was later sent to this locality. It was ordered that no milk be brought upon the premises, and that the milk business be discontinued until such time as the DEPARTMENT saw the completion of its regulations regarding disinfection of the premises. The following report was made by Dr. HUNT :

CHICAGO, July 8, 1895.

HON. WM. R. KERR,

Commissioner of Health.

DEAR SIR :—In accordance with instructions received from ASSISTANT HEALTH COMMISSIONER, Dr. REILLY, on July 3, I have investigated the reported cases of diphtheria at No. 8911 Muskegon avenue, South Chicago.

I was notified that a second burial permit had been issued that morning for another child in the same family ; cause of death of the first permit was given as "diphtheria" and in the latter case as "croup." I notified the South Chicago police to stop the funeral, but the notification reached them too late.

I waited until the family had returned from the funeral and then found that the body was that of a sister of the child who died of diphtheria, and who was buried two days

before. Both bodies were those of the children of one Bednarek, who has a milk depot at 8808 Houston avenue. As soon as Bednarek found that the first child was sick of diphtheria he had both children removed from his residence to that of his brother in order, as he said, not to have any card on his house, and not to stop selling milk.

I had both houses and the milk depot thoroughly disinfected and fumigated that afternoon, and yesterday I saw the physician in charge of the cases, who says that two weeks ago one of Bednarek's children had quinsy, from which it recovered. He claims that the last child did not die of diphtheria, but of croup, and also claims that he did not know that the children he saw at 8911 Muskegon avenue had been removed from the milk depot. Both of these statements are open to a great deal of doubt, and I should advise that the doctor be notified to appear before the BOARD and substantiate his claims.

The undertaker says that he drove the hearse containing the body of the child who died of diphtheria to the door of the church, but that it was not removed from the hearse, and that no one except the parents saw the body after it was put in his care. In the second case, as there was a death certificate given for croup, we cannot hold him in any way responsible. He should, however, be cautioned.

I took with me some culture tubes, but was of course unable to get cultures from the body of the second child, and could do so only in case you think it best to have the body exhumed.

Respectfully,

GEO. C. HUNT, M. D.,

Medical Inspector.

During the middle of September, 1895, it was reported to the DEPARTMENT that a number of cases of typhoid fever had occurred at West Pullman, and all in the families of persons who had been supplied with milk from a certain milkman. The evidence given appeared to clearly demonstrate that the cases had their origin from this source, and that it was a local epidemic of typhoid fever from milk. An investigation of the subject included an examination of samples of milk, water and ice used, several visits to the farm and dairy from which the milk was supplied, and an examination of the water supply upon this farm. It was ascertained that there had been two cases of typhoid fever at this farm, but

upon inquiry it was further ascertained that the persons were some distance away from the barns and lived in a house which had a separate water supply, and a separate drainage system from the dairy, and that none of the workers in the dairy had been in the house or had had any communication with the members of the family in which the sickness had occurred. The general result of the analyses that were made was negative, but under the circumstances it certainly appeared as though there were some relation between these different cases of typhoid.

After due consideration of the subject, the following report was returned to COMMISSIONER KERR:

CHICAGO, September 24, 1895.

HON. WM. R. KERR,

Commissioner of Health.

DEAR SIR:—I desire to make you a preliminary report regarding the typhoid epidemic at West Pullman that we have had under consideration during the past week. So far I have completed the investigation of the milk supplied to this community by F. P. H——. Five samples from his delivery were brought to me on the 19th inst. These were found free from dangerous bacteria. On the 20th I visited his farm at Homewood and his milk depot at West Pullman in order to ascertain the manner in which his milk supply is handled. I found the sanitary arrangements and dairying methods satisfactory. I have also advised him, and have his promise of precise compliance with such directions as will prevent any contamination of his milk supply with water, ice or from the hands of his assistants. I feel certain that if there was ever any danger in the milk it is now entirely free from suspicion. We have still other possible causes of the epidemic under consideration.

Yours respectfully,

ADOLPH GEHRMANN, M. D.,

City Bacteriologist.

In March, 1895, a series of examinations were made for the Civic Federation of samples of milk from a number of public institutions, especially those where the inmates were largely children. The object of this investigation was to

ascertain, if possible, the sanitary quality of the milk, as well as its chemical composition. Some of the results as given below will illustrate the condition found.

| | CHEMIC ANALYSIS. | | | BACTERIOLOGICAL ANALYSIS. |
|---|------------------|------------|-----------------|---------------------------|
| | Specific Gravity | Butter Fat | Solids not Fat. | No. of Bacteria per cc. |
| Home for Juvenile Offenders: Samples taken April, 1896, No. 1 | 32 | 3.4 | 9.04 | 14 000 |
| Home for Juvenile Offenders: Samples taken April, 1896, No. 2 | 32 | 2.8 | 9.43 | 21 000 |
| Home for the Friendless, No. 1 | 32 | 3.0 | 8.96 | 8 000 |
| Home for the Friendless, No. 2 | 30 | 3.6 | 8.56 | 15 000 |
| Orphan Asylum, No. 1 | 34 | 2.0 | 9.27 | 27 000 |
| Orphan Asylum, No. 2 | 32 | 2.4 | 8.83 | 31 000 |
| Foundlings' Home, No. 1 | 32 | 3.0 | 8.96 | 15 000 |
| Foundlings' Home, No. 2 | 34 | 2.2 | 9.31 | 29 000 |
| Chicago Nursery and Half Orphan Asylum, No. 1 | 32 | 2.2 | 8.97 | 18 000 |
| St. Vincent's Infant Asylum, No. 1 | 31 | 2.8 | 8.65 | 34 000 |
| St. Vincent's Infant Asylum (colored with anatto), No. 2 | 36 | 0.8 | 9.53 | 29 000 |

These samples were all examined for tuberculosis by the microscopic method, but in none were any tubercle bacilli found. The number of bacteria present are in accord with a large number of examinations which had been made the previous year, and simply show that the milk was of the usual quality of city milk, being from twenty-four to thirty-six hours old when delivered to the consumer, and consequently contained a sufficient number of bacteria to indicate that the milk would become sour within a few hours. The agitation that followed was the beginning of considerable improvement of the milk supply for these institutions, and it was found that after stirring up the milk dealers and getting various promises from them the supply was very materially improved. The general work of the office, however, is of such an extended nature that the private resources

of the Civic Federation were called in to procure the necessary samples and to aid in seeing that the milk supply remained of a better quality.

STATE REGULATION OF DAIRIES.

A very brief experience in the so-called "milk crusade" showed that the efforts of the DEPARTMENT alone were not sufficient to secure the best quality of milk; but that these needed to be supplemented by supervision of milk production and handling in the dairies beyond the jurisdiction of the city. The State Board of Health was therefore appealed to in the following communication:

To the President and Members, Illinois State Board of Health:

GENTLEMEN: In my efforts, as COMMISSIONER OF HEALTH of Chicago, to improve the milk supply of the city and so to reduce the evils to health and the loss of life, especially among infants and young children, caused by impure and adulterated milk, I find the principal remaining difficulty to be the quality of the supply as it is received from the country shippers. I can deal effectively with our city vendors, and the recent great improvement in the quality of the samples daily tested in our laboratory shows that, so far as city adulteration is concerned, our ordinances and police power are sufficient.

I am satisfied, however, after a careful investigation, that much of the milk received by rail from localities beyond our jurisdiction is adulterated, or impure, or the product of animals which, if not positively diseased, are fed upon improper or unwholesome food, or is produced and handled under unclean and insanitary conditions. Such adulterated, impure and unwholesome milk is, of course, the result of violations of the State law intended to regulate the sale of milk and to provide penalties for the adulteration thereof. But I am advised that this law is wholly inoperative and that a conviction thereunder is well-nigh impossible. The fact that our tests of samples—taken in transit or on arrival and before delivery to the city dealer—show an excess of watery fluids and a deficiency of butter fat and other solids, is not accepted as evidence sufficient to satisfy the jury of the locality that the shipper of such milk is guilty of adulteration or other violation of the statute. Even when substances

are found which do not belong in normal milk, but which are commonly present in impure water—for example, the characteristic substances which are proof of water pollution—even when the presence of these substances has been demonstrated the fact is set aside by justice and jury, and the question of guilt or innocence is made to hinge on answer to the question, Did you see the defendant put water in this milk?

Under these circumstances it is manifestly impossible to secure the ends sought for by the statute, which are defined to be the prevention of the adulteration with water or any foreign substance of milk to be sold for human food; or the sale of milk from which the cream has been taken or the “strippings” withheld; or drawn from a diseased cow or from a cow fed on distillery waste—all of which things are forbidden by the law, and which we can now prevent only in the territory within one mile of our city limits.

I have thought it probable that the State Board of Health might lend its valuable assistance to the city for remedy of these defects and correction of the evils, by promulgating a set of rules and regulations for the conduct of dairies and establishments engaged in the production and supply of milk for human food. These rules and regulations should be enforced under authority and supervision of the State Board of Health at the expense of any municipality desirous of availing itself of such measures for the protection of the purity of its milk supply by their enforcement beyond the limits of its own jurisdiction.

Founded upon the specific provisions of the statute such rules and regulations would cover—

1. An inspection of the physical condition of the animal, so as to prevent a diseased milch cow—especially one afflicted with tuberculosis—from being used for dairy purposes. (Section 2, Act of 1879.)

2. An inspection of the stables and premises where cows are kept for the production of milk for market and of the food of such cows, so as to prevent an unhealthy condition of the premises or the use of food that produces impure, diseased or unwholesome milk. (Sec. 2, *ibid.*)

3. A supervision of the method of handling milch cows and their product, so as to prevent the adulteration of milk or cream, intended for sale, by the addition of water or any other foreign substance—such “foreign substance” to be held to include contamination from the person or clothing of employes or from unclean utensils or surroundings. (Sec. 5, *ibid.*) And in this connection, the inspection should extend to the health of milkers and others engaged in

handling milk, so as to prohibit those suffering with eruptions or contagious diseases from pursuing their avocation until free from the danger of conveying contagion or infection to the milk.

There seems to be sufficient precedent in your school vaccination order of 1881, and in your rules and regulations for the prevention and suppression of epidemic and malignant diseases and for the inspection of immigrants, for such exercise of the authority with which the State Board is vested by organic act—to wit: "To make such rules and regulations and such sanitary investigations as they may from time to time deem necessary for the preservation or improvement of the public health," and to exercise a "general supervision of the interests of the health and lives of the citizens of the State."

As I am very desirous that action in the premises should be taken at your forthcoming meeting, I have addressed a copy of this communication to each individual member of your Board, in order that judgment may be matured and conclusions arrived at in advance of the meeting.

I have the honor to be, gentlemen, very respectfully,

WM. R. KERR,

Commissioner of Health.

The responses of the members were of such a character that, at the request of the COMMISSIONER, the following preamble, resolutions and rules and regulations were prepared by the ASSISTANT COMMISSIONER, Dr. REILLY, and presented by him to the Board, by which they were promptly adopted at its meeting of September 30, 1895 :

WHEREAS, The State Board of Health of the State of Illinois is vested by the organic act of July 1, 1877, with power and authority "to make such rules and regulations and such sanitary investigations as they may from time to time deem necessary for the preservation or improvement of the public health," and to exercise a "general sanitary supervision of the health and lives of the citizens of the State;" and

WHEREAS, The Legislature of the State has recognized the importance of a pure milk supply in its bearing upon health and life, especially of infants and children, by enacting laws forbidding the use of a diseased milch cow for dairy purposes; and the keeping in an unhealthy condition

of cows for the production of milk for market, or for sale or exchange; and the feeding of such cows on food that produces impure, diseased or unwholesome milk; and the addition of any foreign substance to milk or cream intended for sale or exchange; now, therefore, be it

Resolved, By the State Board of Health that the following rules and regulations, based upon the statutes concerning the production and sale of milk and cream for human food, be and the same are hereby adopted.

Resolved, That the Secretary of the Board is hereby authorized and instructed to make due promulgation of the same by publication as the official order of the Board.

RULES AND REGULATIONS of the Illinois State Board of Health concerning the production and sale of milk and cream for human food, based upon an Act of the State Legislature, entitled, "An Act to Regulate the Sale of Milk and to provide Penalties for the Adulteration thereof." Approved May 28, 1879; in force July 1, 1879.

1. No building shall be used for stabling cows for dairy purposes which is not well lighted, ventilated, drained and constructed.

2. No building shall be used for stabling cows for dairy purposes which is not provided with a suitable floor, laid with proper grades and channels to carry off all drainage; if a public sewer abuts the premises upon which such building is situated, they shall be connected therewith.

3. No building shall be used for stabling cows for dairy purposes which is not provided with good and sufficient feeding troughs or boxes, and with a covered, water-tight receptacle, outside of the building, for the reception of dung and other refuse.

4. No water-closet, privy, cess-pool, urinal, inhabited room, or workshop, shall be located within any building or shed used for stabling cows for dairy purposes, or for the storage of milk or cream; nor shall any fowl, hog, horse, sheep or goat be kept in any room used for such purposes.

5. The space in buildings or sheds used for stabling cows shall not be less than five hundred (500) cubic feet for each cow, and the stalls therefor shall not be less than four (4) feet in width.

6. It shall be the duty of each person using any premises for keeping cows for dairy purposes to keep such premises thoroughly clean and in good repair and well painted or whitewashed at all times.

7. It shall be the duty of each person using any premises for keeping cows for dairy purposes to cause the building in which cows are kept to be thoroughly cleaned, and to remove all dung from the premises so as to prevent its accumulation in great quantities.

8. Every person keeping cows for the production of milk for sale shall cause every such cow to be cleaned every day and to be properly fed and watered.

9. Every person using any premises for keeping cows shall cause the yard used in connection therewith to be provided with a proper receptacle for drinking water for such cows; none but fresh, clean water to be used in such receptacle.

10. Any enclosure in which cows are kept shall be graded and drained so as to keep the surface reasonably dry and to prevent the accumulation of water therein, except as may be permitted for the purpose of supplying drinking water; no garbage, urine, fecal matter or similar substances shall be placed or allowed to remain in such enclosure, and no open drain shall be allowed to run through it.

11. Any person using any premises for keeping cows for dairy purposes shall provide and use a sufficient number of receptacles made of non-absorbent materials, for the reception, storage and delivery of milk, and shall cause them at all times to be cleaned and purified, and shall cause all milk to be removed without delay from the room in which the cows are kept.

12. It shall be the duty of any person having charge or control of any premises upon which cows are kept, to notify the Secretary of the State Board of Health at Springfield, by telegraph, of the existence of any contagious or infectious disease among such cows immediately upon the discovery thereof, and to thoroughly isolate any cow or cows affected or which may reasonably be believed to be infected, and to exercise such other precautions as may be directed, in writing, by the said Secretary.

13. It shall be the duty of any person owning or having control of cows, used for the production of milk for sale or exchange, to submit said cows to the tuberculin test for tuberculosis, on the written order of the Secretary of the State Board of Health.

14. It shall be the duty of any person having charge or control of any premises upon which milk or cream is produced, handled, stored or distributed, to notify the Secretary of the State Board of Health, by telegraph, immediately upon the discovery of any case of Asiatic Cholera, Croup, Diphtheria, Measles, Membranous Croup, Scarlet Fever,

Smallpox, Typhoid Fever, Typhus Fever, or any other contagious or infectious disease upon such premises. No milk or cream shall be sold, exchanged, given away or in any other manner distributed from such infected premises until all danger of spread of disease has been removed, and the Secretary certifies to that effect. No person who attends cows or milks them, or who has the care or handling of vessels for the sale, storage or distribution of milk or cream, shall enter any place or premises wherein exists any of the diseases mentioned herein, nor shall any such person have any communication, direct or indirect, with any person who resides in, or is an occupant of, such infected place.

15. Strict cleanliness of the hands and persons of milkers and those engaged in the handling of milk and cream, and of the bodies of the cows, especially of the udders and teats, must be enforced at all times, to the end that no impurity or foreign substance may be added to the milk or cream—such addition being declared adulteration by the statute.

16. No person shall add water or any other foreign substance to milk or cream offered or intended for sale or exchange. Milk offered for sale as whole milk or sold as such, which contains more than eighty-eight (88) per cent of watery fluid or less than twelve (12) per cent of solids, including three (3) per cent of butter fat, is *prima facie* watered, and such watering is declared an adulteration by the statute, the punishment for which is a fine of not less than fifty dollars (\$50) nor more than two hundred dollars (\$200) for each and every offense. (Act of July 1, 1897, Sections 2 and 6.) Any milk that is obtained from cows fed on distillery waste, commonly called "swill," or upon any substance in a state of putrefaction is also declared by the statute to be impure and adulterated; and the feeding of such substances is a misdemeanor, punishable by fine as above.

17. The foregoing rules and regulations shall apply to all premises upon which cow's milk is produced for sale or exchange and to the milch cows kept thereon. The duty of their enforcement is devolved by the organic act, creating the State Board of Health, on all police officers, sheriffs, constables and all other officers and employes of the State and upon all health authorities of the State. Such authorities embrace—

1. Regularly constituted Boards of Health of incorporated cities, towns and villages.

2. Supervisors, assessors and town clerks of townships.

3. County commissioners of counties in which there are no township organizations.

The officers designated in the second and third classes constitute *ex officio* the Boards of Health for their respective territories in the absence of any other provision therefor.

18. For the benefit of municipalities whose milk supply is obtained wholly or in part from localities beyond their respective jurisdictions the State Board of Health will commission special inspectors for the enforcement of these rules and regulations, the expenses of such inspectors and of the necessary printed blanks for reports, commissions, certificates, etc., to be defrayed by the municipality benefited. Upon the report and affidavit of any such inspector that these rules and regulations are complied with in the conduct of any given dairy, the Secretary of the State Board of Health shall furnish a certificate to that effect under the seal of the Board. This certificate shall, however, be revocable by the Board upon proof of the violation or neglect of enforcement of the rules and regulations, and due publication of the cause of such revocation shall be made and certified to the municipality interested. All acts of the special inspectors shall be subject to the supervision of the Board through its Secretary or otherwise as may be designated by the Board from time to time.

19. These rules and regulations shall take effect and be in force on and after their promulgation.

Adopted September 30, 1895.

LAWS AND ORDINANCES

REGULATING SALE OF MILK AND CREAM AND KEEPING
OF MILCH COWS IN THE CITY OF CHICAGO.

ESSENTIAL PROVISIONS OF THE SPECIAL ORDINANCES.

a. The Superintendent of the Milk and Food Department and his assistants and inspectors have the right to enter all places where milk and cream are stored or kept for sale. (Sec. 12.)

b. All places, and all cans and vessels used in handling milk and cream shall be kept neat and clean. (Sec. 15.)

c. Every person, firm or corporation engaged in the milk business shall pay each year beginning May 1st, a license fee of \$10 for every wagon, vehicle, depot or store from which milk or cream is sold (Sec. 16) with the following exceptions:

No license fee is required of PRIVATE persons who own one or more cows and who sell milk from these cows to their neighbors by peddling the same by hand. (Sec. 16.)

No license fee is required of hotel, restaurant or boarding-house keepers who furnish milk or cream with meals. (Sec. 32.) If, however, milk or cream is sold by measure to customers who carry it away with them a license fee is required.

d. No milk or cream shall be sold or offered for sale from any wagon, carriage or other vehicle (this includes sleighs) unless the vehicle be lettered in a conspicuous place, in letters at least five inches high, giving the name and address of the dealer and the number of the wagon. (Sec. 18.)

e. It is unlawful for any person or persons to sell or offer for sale any milk from which the cream or *any part thereof* has been removed; unless the can or package containing it is plainly marked with a metal tag at least three (3) by five (5) inches in size upon which tag shall be stamped in plain letters the words "Skimmed Milk." (Sec. 19.)

f. No milk ("Tagged Milk" or "Straight Milk") or cream shall be sold or offered for sale that has had any foreign substance whatever (water, color, preservative, condensed milk, etc.) added to it. (Sec. 22.)

g. No person or persons shall sell or offer for sale any milk or cream from cows fed on the refuse, mash or slops from any distillery, vinegar factory or any such place, to wit, breweries. (Sec. 35.)

h. No cream shall be sold or offered for sale unless it contains at least fifteen (15) per cent. of butter fat (15 pounds in 100 pounds of milk). (Sec. 25.)

i. No milk shall be sold or offered for sale unless it contains at least three (3) per cent. of butter fat (3 pounds in 100 pounds of milk) and twelve (12) per cent. of total solids or if it contains more than eighty-eight (88) per cent. of watery fluids. (Sec. 24.)

PROVISIONS OF THE MUNICIPAL CODE CONCERNING SALE
OF MILK AND KEEPING OF MILCH COWS IN THE CITY
OF CHICAGO.

AS TO MILK.

SECTION 1397. [UNWHOLESOME MILK SHALL NOT BE BROUGHT INTO THE CITY.] That no meat, fish, birds or fowl, or vegetables, nor any milk, not being then healthy, fresh, sound, wholesome and safe for human food, nor any meat or fish that died by disease or accident, shall be brought within said city, or offered or held for sale in any public or private market as such food anywhere in said city.

SEC. 1404. [UNWHOLESOME MILK SHALL NOT BE SOLD.] That no meat, fish, vegetables or milk, or unwholesome liquid shall knowingly be bought, sold, held, offered for sale, labeled, or any representation made in respect thereof under a false name or quality, or as being what the same is not as respects wholesomeness, soundness or safety for food or drink.

SEC. 1410. [FURTHER PROHIBITION OF UNWHOLESOME MILK.] That no person shall have at any place where milk, butter or cheese is kept for sale, nor shall, at any place, sell or deliver or offer or have for sale or keep for use, nor shall any person bring or send to said city, any unwholesome, skimmed, watered or adulterated milk, or milk known as "swill milk," or milk from cows or other animals that for the most part have been kept in stables or that have been fed on swill, or milk from sick or diseased cows or other animals, or any butter or cheese made from any such milk or any unwholesome butter or cheese.

SEC. 1424. [INSPECTION OF MILK PREMISES AUTHORIZED.] That every butcher, grocer and milk dealer, and their agents, shall allow the parties authorized by the Commissioner of Health to freely and fully inspect their cattle and milk, meats, fish and vegetables, held, offered or intended for sale, and will be expected to answer all reasonable and proper questions asked by such persons relative to the condition thereof and of the places where such articles may be.

SEC. 1730. [PENALTY FOR SALE OF UNWHOLESOME MILK.] Whoever sells or exchanges or has in his possession with intent to sell or exchange, or who offers for sale or exchange any unwholesome produce, poultry, fish or adulterated or unwholesome milk or milk to which water or any foreign substance has been added shall for such offense be punished by a fine of not less than twenty dollars.

SEC. 1731. [DISTILLERY FEED MILK DECLARED UNWHOLESOME. SALE OF "SKIMMED MILK."] All milk produced from sick or diseased cows, and all milk obtained from cows kept in distillery yards or pens and fed on distillery slop

or waste shall be deemed impure and unwholesome within the meaning of this article, and all milk to which water, ice or any other substance has been added shall be deemed adulterated within the meaning of this article; and, it shall be unlawful for any person or persons to sell, offer or expose for sale any milk from which the cream or any part thereof has been removed, unless such milk be sold as "skimmed milk," and the character of the same be expressly and distinctly stated to the purchaser.

AS TO MILCH COWS.

SEC. 1365. [FORBIDS KEEPING COWS IN TENEMENT OR LODGING HOUSES.] No tenement or lodging house nor any portion thereof shall be used as a place of storage for any combustible article or any article dangerous or detrimental to health, nor shall any horse, cow, calf, swine, pig or goat be kept in said house.

SEC. 1414. [WATER, VENTILATION AND FOOD FOR COWS.] No cattle shall be kept in any place of which the water, ventilation and food are not sufficient and wholesome for the preservation of their health, safe condition and wholesomeness of food.

SEC. 1415. [STABLES MUST BE KEPT CLEAN.] Every person shall cause every stable and place where any cows, horses or other animals may be, to be kept at all times in clean and wholesome condition, and shall not allow any animal to be therein while infected with any disease contagious or pestilential among such animals, without a permit from the Health Commissioner.

SEC. 1416. [PERMIT REQUIRED FOR KEEPING COWS.] No cattle, swine, pigs or sheep, geese, goats or horses shall be yarded within the city of Chicago, without the permit of said Commissioner, or otherwise than according to the regulation of the Department of Health.

SEC. 1626. [NOT MORE THAN THREE COWS MAY BE KEPT.] For any person or persons to keep or use any yard, pen, place or premises, within the city of Chicago, in or upon which more than three head of cattle or swine shall be confined or kept at any one time, shall constitute and is hereby declared a nuisance; and, any person or persons creating or permitting said nuisance to exist, having the right or power to abate the same, shall be subject to a fine of not less than twenty-five dollars (\$25) and not exceeding one hundred dollars (\$100) in every case, and to a like fine for every day he or they shall neglect or refuse to abate such nuisance, when notified by the Mayor or Commissioner of Health to abate the same.

AN ORDINANCE ESTABLISHING A DIVISION OF THE DEPARTMENT OF HEALTH TO BE KNOWN AS THE MILK DIVISION. [Passed by the City Council November 21, 1892. Due publication made December 9, 1892. In force December 19, 1892.]

Be it Ordained by the City Council of the City of Chicago :

SECTION 1. [MILK DIVISION ESTABLISHED—CONSTITUTED, HOW.] There is hereby established a Division of the Department of Health of the City of Chicago to be known and designated as the Milk Division, which shall embrace the Deputy Commissioner of Health and such other inspectors and employes as the Council may by ordinance prescribe and establish.

SEC. 2. [DEPUTY COMMISSIONER OF HEALTH CREATED—CONTROL OF.] There is hereby created the office of Deputy Commissioner of Health, who shall have the management and control of all matters and things pertaining to the Milk Division of the Department of Health as herein provided.

SEC. 3. [APPOINTMENT OF.] Said Deputy Commissioner shall be appointed by the Mayor, by and with the advice and consent of the City Council, as soon as may be after the passage of this ordinance, and thereafter on the first Monday in May, 1893, or as soon thereafter as may be.

SEC. 4. [QUALIFICATIONS—SALARY—BOND.] Said Deputy Commissioner of Health shall be a person skilled in the science of analytical chemistry and be a practical chemist. He shall receive a salary of three thousand dollars per annum, payable in equal monthly installments, and shall before entering upon the duties of his office execute a bond to the City of Chicago in the sum of ten thousand dollars, with good and sufficient surety, to be approved by the City Council, conditioned for the fulfillment and performance of the duties of his office.

SEC. 5. [DUTY—RECORD—REPORT.] Said Deputy Commissioner shall have charge of the Milk Division of the Department of Health and control, direct, regulate, supervise and manage its operations. He shall keep a record of every analysis or test of milk or cream that may be made, and he shall make an annual report of the transactions of his Division to the Commissioner of Health, with all such data as may be of public interest.

SEC. 6. [INSPECTION DISTRICTS.] The Deputy Commissioner of Health shall divide the city into Milk Inspection Districts to be made of such size and in such manner as may be necessary. There shall be assigned to each District one

or more Inspectors, but no Inspector shall serve in any one Inspection District for a longer period than four consecutive weeks at any one time, and no Inspector shall again serve in any District until he shall have served in at least two other Districts.

SEC. 7. [INSPECTORS—APPOINTMENT OF—REMOVAL—BOND.] There shall also be attached to the Milk Division of the Department of Health, hereby created, nine Inspectors, who shall be under the direction of the Deputy Commissioner of Health, and shall perform such duties as in this ordinance provided, and as the said Deputy Commissioner may additionally direct. They shall be appointed by the Deputy Commissioner of Health, and be removed or suspended by him at will, and shall give a good and sufficient bond to the City of Chicago in the sum of two thousand dollars, to be approved by the Mayor, and conditioned for the faithful performance of their duties. They shall each receive a salary at the rate of one thousand dollars per year. Two of said Inspectors shall be known as Dairy Inspectors, and shall have had practical experience as dairymen.

SEC. 8. [OFFICES, FURNITURE, APPARATUS, ETC.] The Mayor and City Comptroller are hereby authorized and directed to provide suitable offices at the City Hall for the Department, and the Commissioner of Public Works and the City Comptroller are also hereby authorized and directed to purchase for the use of this Department the necessary wagons, horses, harness and the necessary apparatus, supplies, books and furniture and other property for the use and conduct of the office, and to replenish and supply the same when needed.

SEC. 9. [UNIFORM, BADGE, INSIGNIA—POWERS.] The Deputy Commissioner of Health and Inspectors shall each, when on duty, wear a metal star, designed by the Deputy Commissioner of Health, which shall be supplied by and be the property of the city, and a uniform of the color and style of the present policeman's uniform with such distinguishing emblems or insignia as the Deputy Commissioner of Health may designate. Said Inspectors to furnish their own uniforms without cost to the City of Chicago. They shall each have the power, on demand made therefor, to require the aid, assistance or presence of any police officer, in the performance of any duty enjoined by the provisions of this ordinance, to arrest all persons found violating any of the terms or provisions of this ordinance, and shall have full powers, and perform all the duties of a policeman, as are now provided by the laws and ordinances of the city.

SEC. 10. POLICE DETAILS—POWER OF ENTRY—SAMPLES FOR ANALYSIS—RECORD.] The Deputy Commissioner of Health may at any time when he deems it necessary have one or more police officers detailed, for temporary purposes only, who shall be instructed or directed to collect or assist in the collection of samples of milk or cream in the possession, care, custody or control of dairymen, milk vendors, milk peddlers, milk-wagon drivers and any and all other persons engaged in the sale, offering for sale, exposing for sale, keeping, storing, handling, disposing of, transporting, carrying, exchanging or delivering milk or cream. Said Inspectors or Collectors employed and qualified as such, may enter all places where milk is stored, or kept for sale, and all carriages used for the conveyance of milk, and the said Inspectors, or the Collectors, may take samples for analysis from all such places or carriages, and at the same time a portion of the samples so taken shall, if the person taking the same be requested so to do, be sealed and delivered to the owner or person from whose possession the same is taken. For this purpose there shall be furnished to such police officers bottles tightly corked, furnished by the Deputy Commissioner of Health, on the label of which the officer shall write his name, number and inspection district, as also the name, address and license number, if any, of the person from whom said milk or cream was obtained or taken. Said Deputy Commissioner of Health shall analyze or otherwise satisfactorily test the said samples of milk so taken. The result of such analysis or test shall be recorded and preserved as evidence. Any police officer so detailed as herein provided, instructed or directed shall always be subject to the laws, rules and regulations governing the City Police force of the city, and the Chief of Police is hereby authorized and directed on the written request of said Deputy Commissioner of Health to detail and furnish the necessary number of police officers so requested to perform the duties herein required.

SEC. 11. [RECORDS—ACCOUNTS.] The Deputy Commissioner of Health shall keep all records and books as provided for in this ordinance, and such others as may be necessary for recording all official acts. In such books shall be kept a record of the names, addresses, and places of business of all persons engaged in the sale, transportation and delivery of milk and cream in the City of Chicago, as also of those delivering or selling milk from carriages, wagons or vehicles of any description, the number thereof, as also the number of cows in each and every stable, or dairy, in the City of Chicago, and the name, address and license number of each

milk wagon, driver of any such wagon, carriage or vehicle, and by whom employed; a record of all such examinations, tests or analyses of milk or cream made, together with such other data as may be required by this ordinance, or that may be deemed necessary or of public interest; and also accurate books of account showing all receipts and expenditures of the Milk Division of the Department of Health, and the property belonging to said division.

SEC. 12. [POWERS OF ENTRY—MILK IMPURE, MISDEMEANOR—SAMPLES.] The Deputy Commissioner of Health, Inspector and police officer detailed, directed or instructed to act herein, shall have the right, and it shall be their duty to enter and have full access, egress and ingress to all places where milk or cream is stored or kept for sale, to all wagons, carriages or other vehicles, railroad cars or conveyances of any kind used for the conveyance, transportation or delivery of milk; to any warehouse, place of business, factories, buildings, farms, stables, railroad depot, erections, establishments or places of any kind, to all vessels, cans, packages, refrigerators or receptacles of milk or cream; and to take samples of milk and cream therefrom, not exceeding one quart, for the purpose of inspecting, testing or analyzing the same. Whenever a sample or samples so found and taken shall not correspond with, or shall be in violation of the requirements of this ordinance, the person or persons, firm or corporation in whose possession, care, custody or control such milk or cream may be found, shall be deemed guilty of a misdemeanor, and fined not less than ten dollars nor more than one hundred dollars for each and every offense.

SEC. 13. [SAMPLES, TEST OF VIOLATION OF ORDINANCE.] All samples of milk and cream taken or brought to the office of the Department of Health by the officers thereof or by any other person, shall, by the Deputy Commissioner of Health, be analyzed or otherwise satisfactorily tested, and wherever or whenever said milk or cream so tested or analyzed shall be found violative of the provisions of this ordinance, the necessary steps shall be taken for a prosecution for a violation thereof. The analysis or test herein required may be made with such instruments, apparatus, chemicals or other articles, and to such extent as may, by the said Deputy Commissioner of Health, be deemed necessary.

SEC. 14. [INSPECTION—RESISTING.] It shall be the duty of the Deputy Commissioner of Health (either in person or by one or more of the said inspectors) to visit, view, and inspect all places and vehicles in which milk or cream may be sold, offered for sale, exposed for sale, stored, kept, exchanged, delivered or disposed of, as well as to inspect,

view and examine all vessels, cans, receptacles, packages, refrigerators or compartments of store places or buildings, erections or establishments of any kind containing milk or cream, and ascertain or examine the condition thereof with reference to cleanliness and sanitation, and are authorized, directed and empowered to cause the removal and abatement of any unfit, unclean or injurious conditions attending the keeping, storing, or possession, care, custody or control of milk or cream at and in all places. Any person, firm or corporation, failing, neglecting, delaying or refusing to obey, or conform to any reasonable order or direction under this section, made by the proper officer, shall be deemed guilty of a misdemeanor, and fined not less than ten nor more than one hundred dollars.

SEC. 15. [VEHICLES, PREMISES, ETC., CLEANLINESS—VIOLATION OF SECTION.] All cans, vessels and receptacles used in the hauling of milk or cream, as well as all packages, refrigerators or compartments of stores or other places where milk or cream is kept, stored or hauled, shall be kept and maintained scrupulously neat and clean, and shall be kept free from the presence or vicinity of any article of any kind likely to contaminate or injuriously affect the sweetness, quality or condition of the milk or cream. Any person found violating this section shall be deemed guilty of a misdemeanor, and, on conviction thereof, be punished by a fine of not less than ten dollars nor more than fifty dollars for each and every offense.

SEC. 16. [MILK VENDOR'S LICENSE—LICENSE FEES.] No person or persons, firm or corporation, or milk-wagon driver thereof, shall sell or offer for sale, expose for sale, dispose of, exchange or deliver, or with the intent so to do as aforesaid, have in his or their possession, care, custody or control, milk or cream for human food, without having been first licensed so to do.

Every person or persons, firm or corporation selling or disposing of milk or cream at retail shall, within thirty days after this ordinance goes into effect, and annually on the first day of May, pay license fees as follows:

Every milk or cream vendor selling, offering for sale, exposing for sale, exchange or delivery, or disposing of the same in or from any store, stand, booth, market place, milk depot, warehouse, dairy, cow stable or any building or establishment of any kind, or in or from any wagon, carriage or other vehicle, shall pay the sum of ten dollars. *Provided*, however, that this section shall not apply to private persons who own one or more cows and who sell milk therefrom to their neighbors or customers by peddling the same by hand.

When more than one wagon, carriage or vehicle is used from which milk or cream is sold, offered for sale, there shall be paid at the same time and in like manner, as hereinbefore provided, for each such additional wagon, carriage or other vehicle the sum of ten dollars.

If any person or persons, firm or corporation, commence or engage in the traffic or handling of milk or cream at periods other than those hereinbefore mentioned, he or they shall, before doing so, pay a proportionate part of the license fee, and procure the license in their case required, which license so issued, as well as other licenses and certificate herein required, shall be good for a period ending with the first day of May following the issuance and delivery thereof.

Every person, firm or corporation violating this section or any of its provisions shall be deemed guilty of a misdemeanor, and, on conviction thereof, be punished by a fine of not less than twenty-five dollars nor more than one hundred dollars for each and every offense.

SEC. 17. [LICENSE, ISSUE OF, APPLICATION FOR.] Licenses shall be issued in the names of the applicants therefor. Before the issuance of the license every vendor of milk or cream shall make written application therefor on a printed form provided for that purpose, on which shall be stated :

First—The name, residence and location of the business place or places of the applicant.

Second—The number of cows, if any, owned or controlled by the applicant.

Third—The number and description of each and every wagon, carriage, or other vehicle, used in the milk or cream business.

Fourth—If, after the issuance and delivery of the license, any change be made in the location of the place of business of such licensee, notice thereof must forthwith be given to the Deputy Commissioner of Health.

SEC. 18. [VEHICLE, SIGN ON.] No milk or cream shall be sold, offered for sale, exposed for sale, exchanged, delivered, transported, conveyed or carried on any wagon, carriage or other vehicle, unless there shall be painted thereon, on both sides thereof, in a conspicuous place, and in legible Roman letters, not less than five inches in height, the name of the milk vendor and the number and street of the place of business, and the number of the wagon.

Any violation of the provisions of this section shall be deemed a misdemeanor, and, on conviction thereof, the offenders shall be punished by a fine of not less than twenty-five nor more than one hundred dollars for each and every offense.

SEC. 19. [SKIMMED MILK, PENALTY.] Any vendor of milk or cream, or any driver, servant or agent of such vendor, who shall in the City of Chicago sell or offer for sale any milk from which the cream or any part thereof shall have been taken, shall offer for sale, and sell the same as skimmed milk and not otherwise, and no vendor of milk and no driver, servant or agent of such vendor shall offer for sale, or sell, or have in his custody, possession or control, with intent to sell or deliver the same, any such milk from which the cream or any part thereof shall have been taken, unless the can, vessel or package containing such milk shall have conspicuously attached thereto a steel or metal plate tab on which shall be engrossed the words, "Skimmed Milk," in large, plain, distinct letters; said steel or metal plate tab shall be not less than three (3) inches by five (5) inches in size.

Any persons violating this section shall be deemed guilty of a misdemeanor, and upon conviction shall be punished by a fine of not less than twenty-five (\$25.00) dollars nor more than one hundred (\$100.00) dollars.

SEC. 20. [IMPURE, DILUTED OR ADULTERATED MILK, MISDEMEANOR.] Whoever, by himself, or by his servant or agent, employe or milk-wagon driver, or as the servant, agent, employe or milk-wagon driver of any other person, firm or corporation, sells, offers for sale, exchanges, delivers or transports or carries for the purpose of sale, exchange or delivery, or has in his custody, possession, care or control, with intent to sell, offer for sale, exchange or deliver, or exposes or offers for sale, exchange, transportation or delivery, any milk or cream for human food, which is unclean, diluted, impure, unhealthy, diseased, unwholesome, adulterated or not of the standard of good quality provided for by this ordinance, or milk or cream to which water or any foreign substance has been added, or milk or cream produced from sick or diseased cows, or milk or cream produced from cows kept in an unclean, filthy or unhealthy condition, or milk or cream from cows fed on the refuse or slops from distilleries, vinegar factories, or any similar slops, mash or refuse or on any other than good and wholesome food, or milk or cream that has been exposed to, or contaminated or affected by the emanations, discharges or exhalations from any human beings or animals sick with any contagious or infectious diseases by which the health or life of any person may be endangered, compromised or in any way affected, shall be deemed guilty of a misdemeanor, and on conviction thereof shall, for first offense, be punished by a fine of not less than twenty-five nor more than one hundred

dollars; and for each subsequent offense by a fine of not less than fifty nor more than two hundred dollars.

SEC. 21. [ADULTERATION OR DILUTION.] Any person who shall adulterate milk or cream or reduce or change it in any respect by the addition of water or any foreign or other substance or by the removal of cream therefrom with a view of selling or offering the same for sale or exchange, shall be deemed guilty of a misdemeanor, and on conviction thereof be fined not less than twenty-five dollars nor more than one hundred dollars for each and every offense.

SEC. 22. [FOREIGN SUBSTANCE CONTAINED.] Any person, firm or corporation who shall sell, offer for sale, expose for sale, exchange, deliver, dispose of, or transport, convey or carry, or with any such intent as aforesaid, have in his or their care, custody, control or possession, any milk or cream having therein or containing any foreign or other substance of any kind whatever, or coloring matter, or any adulteration or preservative, whether for the purpose of artificially increasing the quantity of the milk or cream or for preserving the condition or sweetness thereof, or for any purpose whatever, shall be deemed guilty of a misdemeanor, and on conviction thereof shall be fined not less than twenty-five dollars nor more than one hundred dollars for each and every offense.

SEC. 23. [PARTURITION OF COW.] No milk or cream shall be sold, kept, offered or exposed for sale, stored, transported, exchanged, carried, delivered or in any manner disposed of, drawn from cows within fifteen days before and twelve days after parturition, nor shall the same be mixed with any other milk or cream for such purposes. Anyone so offending shall be deemed guilty of a misdemeanor, and on conviction thereof shall be fined not less than twenty-five dollars and not more than one hundred dollars for each and every offense.

SEC. 24. [MILK TEST.] No milk shall be kept, sold or offered for sale, stored, exchanged, transported, conveyed, carried or delivered, or with such intent as aforesaid, be in the care, custody, control or possession of anyone if it contain more than eighty-eight per centum of watery fluids or less than twelve per centum of total solids, of which total solids three of the per centums shall be butter fat.

Offenders under this section shall be deemed guilty of a misdemeanor, and on conviction thereof be punished by a fine of not less than twenty-five nor more than one hundred dollars for each and every offense.

SEC. 25. [PROHIBITED SALES.] No cream shall be sold, offered for sale, exchanged, delivered or be transported or carried for purposes of sale, offering for sale, exchange or delivery that contains less than fifteen per centum of butter fat, or that is taken from any impure, diseased, unhealthy, unclean, adulterated or unwholesome milk, or milk to which any foreign or any substance of any kind has been added, or milk from cows fed on the refuse or slops from distilleries, vinegar factories, or any similar slops, mash or refuse, or any other than good and wholesome food.

Offenders under this section shall be deemed guilty of a misdemeanor, and on conviction thereof shall be fined not less than twenty-five nor more than one hundred dollars for each and every offense.

SEC. 26. [CONDENSED OR EVAPORATED MILK.] No person shall manufacture, sell, or offer for sale any condensed or evaporated milk for domestic use, unless the same shall be put up in packages upon which shall be distinctly labeled or stamped the name or brand by whom or under which the same is made. No condensed or evaporated milk shall be made, sold or offered for sale, exchanged or delivered for domestic use, unless the same is manufactured from pure, clean, healthy, fresh, unadulterated and wholesome milk, from which the cream has not been removed, or unless the proportion of milk solids and butter fat contained in the condensed or evaporated milk shall be in amount the equivalent of milk solids and butter fat as provided by this ordinance.

For any violation of this section, the offender shall be deemed guilty of a misdemeanor and fined not less than twenty-five nor more than one hundred dollars for each and every offense.

Nothing herein shall be construed to prevent the addition of sugar in the manufacture of condensed or evaporated milk.

SEC. 27. [REVOCATION OF LICENSE.] All licenses granted, or certificates issued pursuant to this ordinance may be revoked by the Deputy Commissioner of Health at any time for cause.

SEC. 28. [BUTTERMILK.] Nothing in this ordinance shall be so construed as to prohibit the use or sale of what is known as buttermilk, provided the same is produced from pure and wholesome milk. Should any such buttermilk, however, be sold, kept, offered or exposed for sale, exchanged or transported, conveyed or carried, or be in the care, custody, control or possession of anyone with the intent as aforesaid, which is not the product of pure and wholesome milk, the offenders shall be deemed guilty of a

misdemeanor, and on conviction thereof be fined not less than twenty-five dollars nor more than one hundred dollars for each and every offense.

SEC. 29. [OFFICERS' DEFAULTS.] Any officer or employe of the Milk Division, who wilfully connives at or assists in a violation of the provisions of this ordinance, shall on conviction thereof be punished by a fine of not less than one hundred nor more than two hundred dollars, and shall at once forfeit his office.

SEC. 30. [CONFISCATION OF IMPURE MILK.] All milk and cream from sick and diseased cows, or cows fed on the refuse of slops from distilleries, vinegar factories, or any similar slops, mash or refuse, or that is dangerous, or that may affect or be detrimental to life or health, shall upon discovery thereof by analysis or test made or otherwise, be confiscated, forfeited and immediately destroyed by or under the direction of the Deputy Commissioner of Health, who shall, if done in good faith, be held harmless in damages therefor, in any suit or demand made.

SEC. 31. [SICK OR DISEASED COW, SLAUGHTER.] If any cow be sick or diseased, the owner or person in charge thereof shall not sell, offer for sale, exchange, deliver or keep or expose for sale, exchange or delivery the milk or cream therefrom, but shall at once destroy the same. If, in the opinion of the Deputy Commissioner of Health or any Inspector, any cow is afflicted with a contagious or infectious disease, he shall direct the owner or person in charge thereof to forthwith remove said cow from the premises to a place where it may not spread or cause contagion or infection. A violation of this section shall be deemed a misdemeanor, and on conviction thereof the offender shall be fined not less than twenty-five dollars nor more than one hundred dollars. If the said cow is by the Deputy Commissioner of Health, or any Inspector, deemed incurable, and the owner or persons in charge thereof does not consent to its being killed, said Deputy Commissioner of Health shall notify the State Board of Live Stock Commissioners for the killing of such animal.

SEC. 32. [HOTEL KEEPER, RESTAURANT, ETC.] Every hotel keeper, restaurant keeper or boarding house keeper, who furnishes milk or cream to his or their guests or boarders shall be in all respects subject and amenable to the provisions of this ordinance, saving and excepting the obtaining of license.

SEC. 33. [COW'S STABLES.] All cow stables shall be thoroughly washed out and thoroughly cleaned at least once a week. For failure to do so the offender shall be deemed

guilty of a misdemeanor, and on conviction thereof be fined not less than twenty-five dollars nor more than one hundred dollars for each and every offense.

SEC. 34. [DAIRY, REFUSE MATTER, OFFAL.] All persons, firms or corporations who own or keep a dairy in the City of Chicago shall maintain the premises thereof free from any accumulation of refuse matter or offal, which shall be removed frequently, so as not to endanger the public health.

SEC. 35. [DISTILLERY, ETC., SLOPS OR REFUSE.] No person or persons, firm or corporation, shall keep or have in his or her possession any slops or refuse of any distillery, or vinegar factory, or any similar slops, mash or refuse to feed the same to any milch cow or cows. Each day's failure to comply with this section shall subject the offender to a fine of not less than twenty-five dollars.

SEC. 36. [MONEYS COLLECTED TO TREASURY.] All moneys collected under the provisions of this ordinance shall be duly paid into the City Treasury.

SEC. 37. [ORDINANCE NOT APPLY, WHEN.] The provisions of this ordinance shall not apply to hospitals, orphan asylums, charitable and such institutions where cows are kept for the exclusive use of such institutions and from which no milk or the products of milk are sold.

SEC. 38. [REPEALING CLAUSE.] All ordinances or parts of ordinances in conflict with the provisions of this ordinance are hereby repealed.

SEC. 39. [WHEN IN FORCE.] This ordinance shall take effect from and after its passage and publication.

AN AMENDATORY ORDINANCE CHARGING THE COMMISSIONER OF HEALTH WITH CONTROL AND SUPERVISION OF MILK INSPECTION AND SALE. [Passed by the City Council October 2, 1893. Due publication made October 20, 1893. In force October 30, 1893.]

Be it Ordained by the City Council of the City of Chicago :

SECTION 1. [MILK DIVISION MERGED INTO DEPARTMENT OF HEALTH.] That the Department of Health of the City of Chicago shall have complete charge, control and management of all the business affairs and duties heretofore performed by the Milk Division of said city, provided for by the ordinance of November 21st, 1892, and said Milk Division is hereby merged into and shall become a part of the Department of Health, and all the duties, powers and

functions given to and imposed upon said Milk Division shall be done and performed by the said Department of Health, in like manner as designated by said ordinance of November 21st, 1892, under the control, direction and supervision of the Commissioner of Health.

SEC. 2. [CHEMIC AND BACTERIOLOGICAL LABORATORY.] It shall be the duty of the Department of Health to establish and construct a chemical and bacteriological laboratory for the analysis and examination and testing of water, ice, drugs and all food products, and for the detection of all adulterations of any of the articles herein mentioned kept to be sold, vended, disposed of or offered for sale within the City of Chicago.

SEC. 3. [INSPECTION OF FOOD PRODUCTS, ICE, WATER AND DRUGS.] The inspection of food products, ice, water and drugs shall, so far as possible be managed in the same manner as provided for the inspection and examination of milk by said ordinance of November 21st, 1892, and all the provisions thereof so far as applicable shall be held to apply to the inspection and examination of food products, water, ice and drugs, and the Commissioner of Health shall make such other and further provisions for the regulation of said business as shall be necessary and desirable for the conduct of the same.

SEC. 4. [DEPUTY COMMISSIONER, OFFICE ABOLISHED—SUPERINTENDENT OF MILK AND FOOD CREATED.] The office of Deputy Commissioner, provided for by said ordinance of November 21st, 1892, is hereby abolished and, in place thereof, there shall be appointed by the Commissioner of Health, a Superintendent of the Milk and Food Department and one Assistant Superintendent of said department.

SEC. 5. [SUPERINTENDENT'S QUALIFICATIONS—BOND.] Said Superintendent shall be a person skilled in the science of analytical chemistry and be a practical chemist and, before entering upon his duties, shall execute a bond to the City of Chicago, in the sum of five thousand (\$5,000) dollars, with good and sufficient sureties, to be approved by the Mayor, conditioned for the faithful performance of the duties of his office.

SEC. 6. [INSPECTION PROSECUTIONS—WHEN.] The duties and powers given by said ordinance of November 21st, 1892, to the Deputy Commissioner of Health, shall be performed and carried on by the Commissioner of Health or his Assistant, as he shall direct, and shall be subject, at all times, to the control and supervision of said Commissioner of Health, and said Commissioner of Health, Superintendent

of Food and Milk Department, and the police officers detailed, directed or instructed to act herein, shall have the right, and it shall be their duty, to have full egress and ingress to all places where any articles herein described are kept for sale, and to take samples of all such articles from any such place; such samples shall be reasonable in quantity and be used for the purpose of inspecting, analyzing or testing the same. Whenever a sample or samples thereof found or taken shall not correspond with, or be in violation of the requirements of this ordinance, the person or persons, firm or corporation in whose custody or control such articles may be found, shall be deemed guilty of a misdemeanor and be fined not less than twenty-five (\$25) dollars nor more than one hundred (\$100) dollars, for each and every offense.

SEC. 7. [IMPURE OR ADULTERATED ICE, WATER, DRUGS OR FOOD.] Any person, firm, company or corporation, or any agent or employe thereof, who shall keep for sale, offer for sale or exchange, or shall sell or deliver, or expose for sale, any ice, water, drugs or food which shall be impure, unwholesome, adulterated, or to which any harmful or injurious foreign substance has been added, shall be deemed guilty of a misdemeanor and, on conviction thereof, shall be fined not less than twenty-five (\$25) dollars nor more than one hundred (\$100) dollars, and for a subsequent offense not less than fifty (\$50) dollars nor more than two hundred (\$200) dollars.

SEC. 8. [MILK ORDINANCE STILL IN FORCE.] The provisions of said ordinance of November 21st, 1892, regulating the sale of milk and cream, shall remain in full force and effect, and are not intended to be changed or altered by this ordinance, except so far as the provisions therein are inconsistent with the provisions of this ordinance.

SEC. 9. [WHEN IN FORCE.] This ordinance shall take effect and be in force from and after its passage and legal publication.

AN AMENDATORY ORDINANCE AMENDING SECTION 18 OF AN ORDINANCE PASSED NOVEMBER 21ST, 1892, REGULATING THE SALE OF MILK AND CREAM IN THE CITY OF CHICAGO. [Passed by the City Council March 2nd, 1896. Due publication made March 21st, 1896. In force March 31st, 1896.]

AN ORDINANCE

Amending Section 18 of an ordinance passed November 21st, 1892.

Be it Ordained by the City Council of the City of Chicago:

SECTION 1. That Section 18 of an ordinance passed November 21st, 1892, establishing a division of the Department of Health to be known as the Milk Division, be and the same is hereby amended so as to hereafter read as follows:

SEC. 18. No milk or cream shall be sold, offered for sale, exposed for sale, exchanged, delivered, transported, conveyed or carried on any wagon, carriage or other vehicle unless the owner or owners thereof shall first obtain from the City Clerk two painted metal plates eight inches long and four inches wide, on which shall be stamped the number corresponding to the license, and also the words "Chicago Milk Peddler" together with the year for which the license is issued, which plates the said licensed owner or owners shall cause to be securely fastened on the outside of each side of the box of his vehicle so licensed, or in a conspicuous place, so that the same can be easily seen.

SEC. 2. That all ordinances or parts of ordinances in conflict herewith be and the same are hereby repealed.

SEC. 3. This ordinance shall take effect and be in force from and after May 1, 1896.

AN AMENDATORY ORDINANCE AMENDING SECTION 12 OF AN ORDINANCE PASSED NOVEMBER 21ST, 1892, REGULATING THE SALE OF MILK AND CREAM IN THE CITY OF CHICAGO. [Passed by the City Council September 21st, 1896. Due publication made October 6th, 1896. In force October 16th, 1896.]

ORDINANCE

Amending Section 12 of an ordinance passed November 21st, 1892, regulating the sale of milk and cream in the City of Chicago.

Be it ordained by the City Council of the City of Chicago:

SECTION 1. That Section 12 of an ordinance passed November 21st, 1892, be and the same is hereby amended so as to read as follows:

SEC. 12. The Commissioner of Health, Inspector and police officer detailed, directed or instructed to act herein,

shall have the right and it shall be their duty to enter and have full access, egress and ingress to all places where milk or cream is stored or kept for sale, to all wagons, carriages or other vehicles, railroad cars or conveyances of any kind used for the conveyance, transportation or delivery of milk to any warehouse, place of business, factories, buildings, farms, stables, railroad depot, erections, establishments or places of any kind, to all vessels, cans, packages, refrigerators or receptacles of milk or cream, and to take samples of milk and cream therefrom, not exceeding one quart, for the purpose of inspecting, testing or analyzing the same. Any person, firm or corporation failing, neglecting, delaying or refusing to obey or conform to any reasonable order or direction under this section, made by the proper officer, shall be deemed guilty of a misdemeanor, and fined not less than ten nor more than one hundred dollars, and whenever a sample or samples so found and taken as aforesaid shall not correspond with, or shall be in violation of the requirements of this ordinance, the person or persons, firm or corporation in whose possession, care, custody or control such milk or cream may be found, shall be deemed guilty of a misdemeanor and fined not less than ten dollars nor more than one hundred dollars for each and every offense.

SEC. 2. The provisions of said ordinance of November 21st, 1892, regulating the sale of milk and cream, shall remain in full force and effect, and are not intended to be changed or altered by this ordinance, except so far as the provisions therein are inconsistent with the provisions of this ordinance.

SEC. 3. This ordinance shall take effect and be in force from and after its passage and legal publication.

THE CITY WATER SUPPLY.

ADOLPH GEHRMANN, M. D., CITY BACTERIOLOGIST.CASS L. KENNICOTT, F. C. S., CITY CHEMIST.

DURING the two years, 1895 and 1896, an extended examination of the city water supply by chemic and bacteriologic methods was systematically undertaken. In the early part of 1895 analyses were made weekly from the various tunnels extending from the cribs in Lake Michigan, but later a systematic daily analysis of samples from each of these sources of supply was established. This series has regularly included analyses from five sources daily, except Sundays and holidays, when the laboratory was closed.

In the accompanying table four of these analyses are presented for each day. The other analysis, that of the tap-water in the laboratory, is not included and has not been taken into account in making the tabulations of the sanitary quality of the water supply, because it was mixed water and contained, in a large proportion, the water of Chicago-avenue pumping station, which would cause a misconception of the real state of affairs, as it would be using the data from one source of supply twice.

The methods used in making these analyses are the same as those that were described in the annual report of the DEPARTMENT for 1894. The bacteriologic methods are those ordinarily employed in water analyses for the determination of pathogenic bacteria. In the column of presence of pathogenic bacteria in the table, the percentages given do not indicate the typhoid bacillus, but do indicate any bacteria that were isolated which, by injection experiments, were found capable of causing the death of animals.

Among the cultures of bacteria isolated the *Bacillus coli communis* has been very frequently found. While cultures giving all of the characters which are assigned to the typhoid

bacillus were not found, still, several bacteria were isolated at different times which gave cultural and experimental results so closely resembling the typhoid bacillus that it is quite possible we were dealing with that specific organism. Other bacteria, as various forms of *Proteus*, are also included among the pathogenic bacteria. In fact, whenever an organism was found which was capable of causing the death of a guinea pig by an injection experiment that fact is included in the characterization. In the tables presented we have, first, the daily analyses of the samples derived from the four tunnels collected at the pumping stations on the shore, arranged in months; then the average analyses of the daily samples for each month, the average analyses being given separately for each pumping station; and finally, the average analyses from each of the pumping stations from all the analyses made during the year, and an average of these final four analyses which may be accepted as a very fair statement of the sanitary quality of the water during the entire year.

Similar tables for 1895 are not introduced because of their size and because they have no special interest other than those that are shown in the 1896 tables. From the yearly average it is readily seen that the Fourteenth-street water, or that obtained from a point four miles in the lake, is decidedly better than any of the others. The other three stations, which are from points two miles in the lake, are of about the same sanitary quality; Chicago avenue and Lake View being the worst, while Hyde Park is somewhat better. The average of all of the chemic and bacteriologic analyses of water would cause the characterization of the public water supply of Chicago during the year 1896 to be "suspicious." On twenty-three days, or nearly ten per cent. of the days examined, the water contained bacteria of a pathogenic character and the colony count shows a daily average of over six thousand bacteria to the cubic centimeter, which is far

above the limit for potable water. Although the supply from the four-mile crib through the Fourteenth-street tunnel shows the best average analysis, the best that can be said of it is that the degree of contamination is less than that of the intakes nearer shore.*

* A tabulation of the sanitary characterizations of the water supplied by the four different tunnels for the period from January 1, 1896, to about the middle of August, was made by the ASSISTANT COMMISSIONER for the information of the Mayor and a special committee on the water supply. Contrary to a general preconception, the Fourteenth-street tunnel water did not show the best in this tabulation—the order being as follows: Hyde Park, 81 per cent. "good" or "usable," 19 per cent. "suspicious" or "bad;" Chicago avenue, 80 per cent. "good" or "usable," 20 per cent. "suspicious" or "bad;" Fourteenth street, 79 per cent. "good" or "usable," 21 per cent. "suspicious" or "bad;" Lake View, 55 per cent. "good" or "usable," 45 per cent. "suspicious" or "bad."

From time to time sudden and unaccountable contamination had been noted in all the sources of supply, but chiefly that from the four-mile crib. The result of this tabulation led to further search, the details of which are given in the following report of Dr. GEHRMANN, dated September 8, 1896:

"The dumping of dredgings from scows in the lake has been done to such an extent that your attention should be directed to this form of contamination of the water supply. The scows are towed out midway between the Van Buren-street opening of the Government pier and the four-mile crib and there emptied. We have seen and recorded the dumping of tows as follows:

- September 2, 12 m., tug Mentor, F. & C. Co., two scows.
- September 2, 12 m., tug William Rollar, W. A. McGiles, D. Co., one scow.
- September 2, 2.30 p. m., tug Commodore, C. D. & D. Co., two scows.
- September 3, 8.30 a. m., tug W. Rollar, one scow.
- September 3, 2 p. m., tug W. Rollar, two scows.
- September 3, 4 p. m., tug Mentor, one scow.
- September 4, 8 a. m., tug William Rollar, one scow.
- September 4, 2 p. m., tug William Rollar, two scows.

"Samples of water for analysis were collected at points outside the area where the dumping is being done, and over this area at various times, from immediately after the dredgings were discharged until two hours afterwards. The result of putting dredgings into the lake is easily seen by the discoloration of the water. Areas of dirty water may be traced for a mile in different directions, according to the direction of the wind. Examination of water in these discolored areas, when compared with examinations outside of the areas and with the examination of samples that were collected last year at different points between the Hyde Park crib, the four-mile crib and the outer Lake View crib, show that the contamination is serious. The suspended matter in the samples shows epithelial scales, portions of hair and vegetable cells in great variety. The bacteriologic cultures of the water show that intestinal and decomposition bacteria are always present. Varieties found include *Bacillus coli communis* and *Proteus vulgaris*. The dumping of dredgings into the lake extends the area of contamination that already exists from the river and those sewers that empty along the water front. The dredgings are placed so far from shore that they can easily reach the cribs. The sudden and apparently uncountable changes in the character of the water from the intakes are in part due to the presence of these dredgings. Some regulation should be made in regard to this matter so that the constant possibility of endangering the purity of the water supply can be avoided."

Action was at once taken in accordance with Dr. GEHRMANN's recommendation, and all dumping in localities likely to affect the intakes was absolutely prohibited. Thereafter the quality of the Fourteenth-street supply improved to such an extent as to make the average for the year the best of the four sources.—F. W. R.

There is an area of continually contaminated water along the lake front. This area under favorable conditions—that is, easterly or northeasterly winds and no rainfall—extends only a short distance from shore, but when rainfall occurs and westerly winds prevail the area gradually extends further and further into the lake. During the greater part of the year this area of contaminated water extends between a mile and a half and two miles from shore, but occasionally it may extend a much greater distance, as will be seen in the table of analyses of samples taken as far as twelve miles out into the lake. To attempt to obtain pure water by locating cribs beyond this line of permanent contamination leads to a false security, because at one time the area of contamination may be determined as extending a certain distance into the lake, at another time it may have receded, or again, it may have extended to a much greater distance.

From the daily analyses warnings have been issued to the public as to the quality of the supply. The samples are brought to the laboratory at 9 o'clock in the morning and the ammonia determinations, oxygen consumed, and chlorides are determined at once, the report being on the COMMISSIONER'S desk at 11 o'clock. The bacteriologic work is begun at once, but, of course, is not finished the same day. Within the next three days a report is rendered which is taken into account in the preparation of the final opinion as to the quality. The chemic analyses always give sufficient evidence to prepare the warning statements to the public, the results as found simply indicating the conditions which would accompany the contamination, and which would possibly give rise to an epidemic of typhoid fever or intestinal disease. In looking over the tables it will be found that the bacteriologic results, giving evidence of contamination, occur one or two days after the first evidence of the altered quality of the water, as already determined by the chemic

analyses. We have, therefore, come to use the results of the chemic examination at once and not wait for the final bacteriologic findings before making a statement to the public.

From the daily analyses a statement of the weekly sanitary quality of the water is prepared. This has been arranged in the form of a curve, so that one may see graphically the changes in the quality of the water at different times during the year. The methods of determining this statement of the sanitary quality is as follows:

Four qualities are designated: "good," "usable," "suspicious" and "bad;" and three degrees of each. When the supply is designated as "good" or "usable," the samples have shown an entire absence of any quality capable of producing disease. When designated as "suspicious" or "bad," the samples have shown qualities, at one or more times during the week, capable of producing disease.

The quality of "good" is determined by an entire absence of nitrates and nitrites; by traces only of free ammonia; by not more than .001 part per 100 000 of albuminoid ammonia; by entire absence of pathogenic bacteria; and by a count of bacteria of less than 500 per cc.

The quality of "usable" is determined by an entire absence of nitrates or nitrites; by free ammonia not in excess of .004 part per 100 000 at any time; by albuminoid ammonia not in excess of .009 part per 100 000 at any time; by an entire absence of pathogenic bacteria; and by a count of bacteria not more than 1000 to the cc.

The quality of "suspicious" is determined by any presence of nitrates or nitrites; by any excess of free and albuminoid ammonia beyond .004 and .009 respectively; and by any excess beyond 1000 bacteria to the cubic centimeter, whether it occurs on one or more days.

The quality of "bad" is determined by the presence of free or albuminoid ammonia beyond the above figures and of nitrates or nitrites; by the presence of pathogenic bacteria and by a count of bacteria of more than 1000 to the cubic centimeter.

The first, second or third degree of the designated quality is determined by the more or less continual presence or absence of the factors of that quality and by the closeness to which the next quality is approached. The presence of any one of the factors of quality, even when the others are absent, determines the designation of quality; and if they are all present, if only at one time, the highest grade of the quality is indicated.

In addition to this the average findings and their relation to one another—with respect to the proportion furnished by each tunnel to the total supply—are taken into consideration in the statement of the sanitary quality of the total supply. The characterization is a matter of expert opinion and all data accessible are considered in making the statement.

In regard to what the various elements in the tables indicate, the following may be said: The chemic sanitary analysis of water simply indicates conditions which render it highly probable that bacteria capable of producing disease are present; while the bacteriologic analysis deals with the bacteria themselves and attempts to demonstrate either the presence or the absence of the actual factors which would produce disease. Free ammonia exists usually as salts of ammonia and is liberated by boiling the water when alkaline. Free ammonia indicates old contamination. It is one of the end-products of the decomposition of albuminous or nitrogenous matter. The decomposition of urea gives free ammonia. Albuminoid ammonia does not exist in the water as ammonia, but may be defined as the ammonia derived from albuminous or nitrogenous matter, which is liberated or

produced by boiling such material with an alkaline solution of permanganate of potassium. Urea upon boiling with alkaline potassium permanganate gives albuminoid ammonia. The chlorine that is present is derived from kitchen wastes, from urine and from washings of the soil. Allowing for chlorine usually present in natural waters, any considerable rise in amount would indicate probable contamination with sewage. The oxygen consumed, determined by boiling the water with an acid solution of potassium permanganate and determining how much permanganate is used during the boiling, indicates the relative amount of organic matter that is present, and is of considerable value when a series of analyses have been made from day to day. The bacteria per cc. indicate the number of colonies that develop upon plate cultures, grown at room temperature during two days in a cc. of water shortly after its collection. The presence of pathogenic bacteria indicates the presence of bacteria which are capable of causing the death of animals when injection experiments are made.

The following passages from "Notes and Comments, by the ASSISTANT COMMISSIONER," in the September, 1896, Monthly Report, are based on the results of this series of analyses, which are believed to be unique in extent and thoroughness:

The causes of the water pollution are obvious: The foul wastes and sewage of between 300 000 and 400 000 people are discharged directly into the lake, and a similar output of upwards of 1 300 000 additional population finds its way more or less directly into the same source of our water supply. A rainfall of one inch flushes the putrid contents of the sewers into the branches and thence, with their accumulated filth, out through the main river into the lake, where it seldom fails to reach one or more of the intakes.

The permanent and radical relief which it is hoped to secure from the operation of the Main Drainage Channel involves the shutting off of all the lake-emptying sewers by intercepting sewers along the north shore to discharge into

the North branch and similar sewers along the south shore to empty into the South branch. If the Drainage Channel were now in operation its usefulness would be limited by every cubic foot of sewage still discharged into the lake. The intercepting sewers are essential to the full benefit to be obtained by the Main Drainage Channel. They will require at least two years to construct after the necessary funds are secured. It is recommended, therefore, in this connection, that estimates of their cost be at once prepared and that such other steps be taken as will enable the work of construction to be begun as soon as practicable.

As a further measure of improvement of the water supply in general and of relief to the dense populations living along or doing business near the river and its branches, the pumping works at Bridgeport should be remodeled and their capacity increased. The city is authorized by the Munn resolution of 1881 to pump 60 000 cubic feet per minute from the South branch into the Illinois and Michigan canal. Not 50 per cent. of this quantity has been pumped, on the average, since the passage of that resolution, and the present plant is believed to be unable to handle even this quantity continuously.

The contents of the main river from between the pier heads, and of the South branch to the pumping station, are figured by the engineers to be approximately 55,000,000 cubic feet at Chicago datum. If the pumps lifted 60,000 cubic feet a minute into the canal, as authorized, the entire contents of the river and South branch would, therefore, be removed once every sixteen hours and to this extent the constant ooze and flow of the sewage out into the lake would be prevented. The substitution of the Dutch lift-wheel for the centrifugal pumps now in use would be a measure of economy with greatly increased efficiency. It would pay even though the Main Drainage Channel should be available within the next two years and it would be useful as an auxiliary after that result is attained.

In this connection consideration is asked for the necessity of securing relief legislation, at the forthcoming session of the General Assembly, looking to authorization of the use of the completed portion of the Main Drainage Channel, with such dilution as may be afforded by the river and South branch, pending their improvement and the construction of the additional canals or conduits which will be required to furnish 20 000 cubic feet for every 100 000 population. The fact should be kept in mind that, as the law now stands, not one drop of Chicago's sewage can be turned into the Channel until a flow of this quantity can be maintained and properly

disposed of below Lockport to the satisfaction of the State Commissioners. It is a matter of uncertainty as to time when these requirements of the law, as it now stands, can be complied with. Meanwhile, unless relief legislation be obtained, twenty-six miles of finished channel of magnificent proportions, and costing as many millions of dollars, contributed by Chicago tax-payers, must lie idle while the city continues to stew in its own filth and the lake continues to grow more and more polluted, to the increasing injury of the public health and sacrifice of human life.

These considerations furnish an additional argument for the immediate extension of the two-mile tunnels, for the improvement of the Bridgeport pumping plant, and for at once laying the foundation for the construction of the intercepting sewers.

Tables of the results of the daily examinations—chemic and bacteriologic—of the public water supply of the city during 1896, together with certain meteorologic data—daily wind movement and direction, precipitation and temperature—more or less directly affecting the sanitary quality of the water, are appended, beginning on page 190. These results are also summarized by monthly and yearly averages in the table on page 214.

[From time to time during the year diagrams showing the sanitary quality of the water by weeks and the deaths from typhoid fever and other diseases affected by the water supply have been prepared by Dr. C. St. C. DRAKE, Assistant to the Registrar of Vital Statistics, and published with the Monthly Reports of the DEPARTMENT. These have formed the basis for the accompanying diagrams which represent the daily observations of the City Bacteriologist and the City Chemist on the character of the public water-supply, tabulated in weekly averages, between December 1, 1895, and December 26, 1896; and they are here collated with certain mortality data related more or less directly to the sanitary quality of the water.

Diagram I illustrates the direct relation between precipitation or rainfall and lake pollution. With one exception a rainfall of one inch or more is seen to be followed by a rise in the line showing a "suspicious" or "bad" quality of the water—the degree of such rise being largely affected by wind movement. Winds of moderate velocity, from south

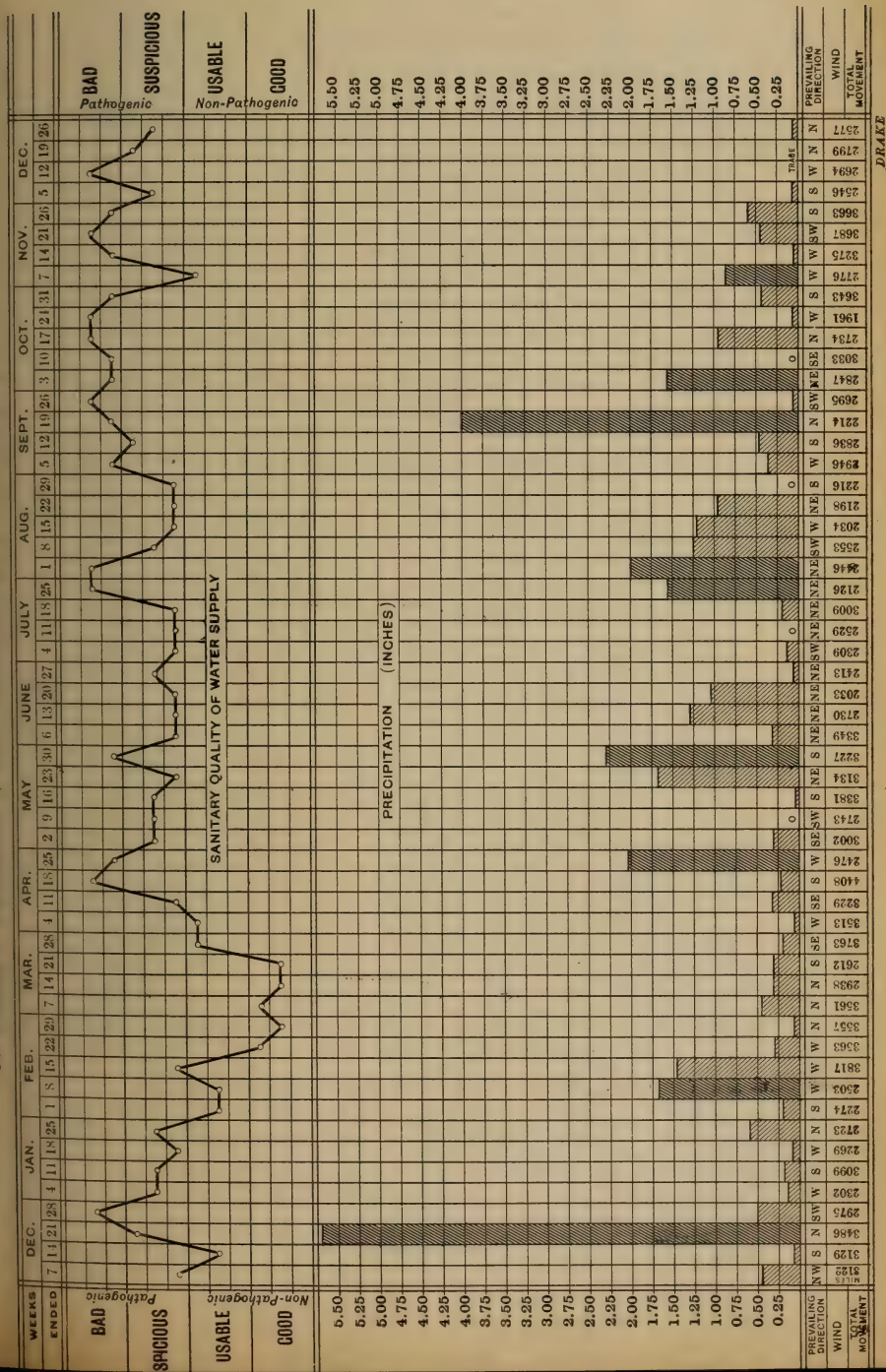
of east around to the west, increase the degree of pollution by drifting the contaminated shore-water out to the tunnel intakes.

The one exception noted to this otherwise uniform rule is seen in the week ended April 18, where the rise in the water-pollution line precedes the heavy rainfall (more than two inches) of the week of April 25. This was caused by the drifting of polluted shore-ice out into the lake in the vicinity of the intakes, where it was rapidly melted under an unusually high temperature for the season of the year—the maximum, on the 16th, being 84° F. and the mean for the week being 68° F.

Diagram II tells its own story so clearly as to require little explanation. The rise in the water-pollution line is followed with almost mathematical accuracy by a rise in the death lines of the acute intestinal diseases and of typhoid fever—the former reaching a maximum usually within a week; the latter, owing to the longer period of incubation and less acute progress of the disease, within five or six weeks. "Acute intestinal diseases," for this purpose include diarrhea, dysentery, enteritis, gastro-enteritis, cholera morbus and cholera infantum.

The effect of temperature in this latter disease—cholera infantum—is strikingly shown in the sudden rise of the line from the week of June 16, with a mean temperature of 61°, to the week of June 23, with a mean temperature of 69°. The average daily deaths for the following eleven weeks—up to September 12, when the mean temperature had fallen to 62°—were so great that the continuous line is not carried out on the diagram, but the figures of the average daily deaths are given at the ends of the short sloping lines; the right-hand slopes showing continuous rise, the left-hand showing continuous decline.—F. W. R.]

| BAD | SUSP | USAB | GOOD |
|------------|------|----------------|------|
| Pathogenic | | Non-Pathogenic | |



DECEMBER 26, 1896, INCLUSIVE.

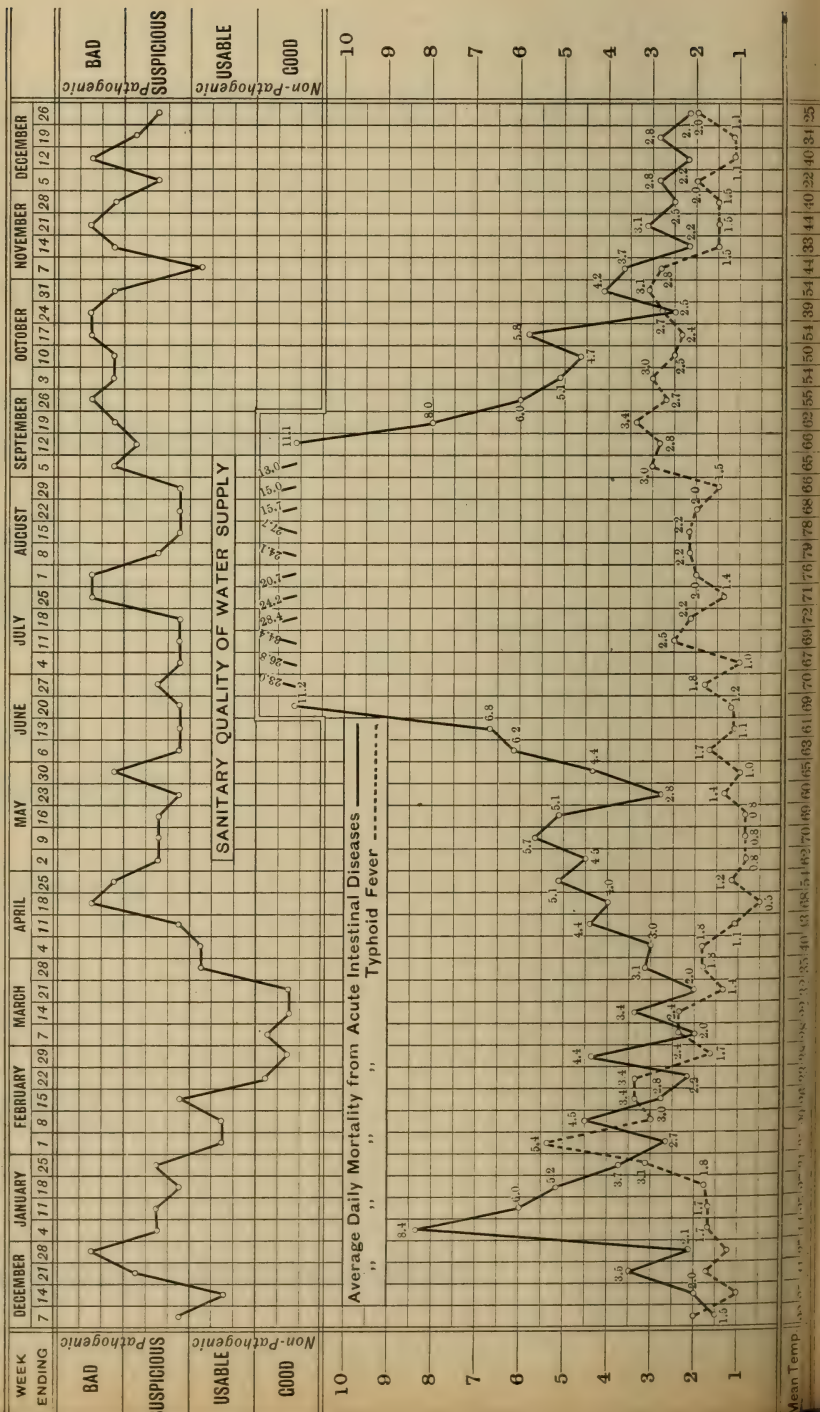
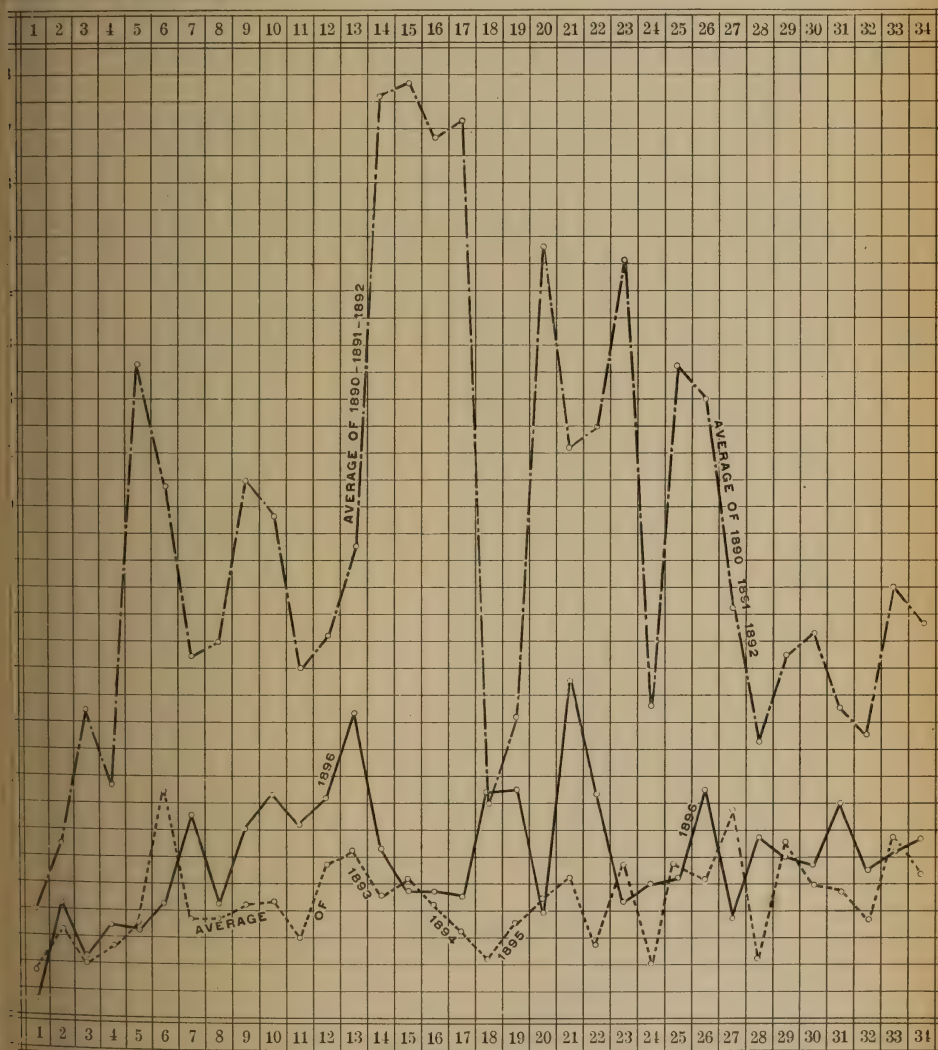


DIAGRAM SHOWING EFFECTS OF CHARACTER OF WATER SUPPLY ON PREVALENCE OF TYPHOID FEVER.

As shown in the reports of ARTHUR R. REYNOLDS, M. D., Commissioner of Health, City of Chicago, and ALLEN HAZEN, S. B., Chief of the Water Department, World's Columbian Exposition—published in COMMISSIONER REYNOLDS' Annual Report, 1893—the sanitary quality of the public water supply was greatly improved in 1893 by the closing of the shore intakes and the opening of the four-mile tunnel. Other improvements followed in 1894-95, and the effect is seen in the dotted line representing the three years, as compared with the dot-and-dash line representing the three years 1890-92, inclusive, when the water was only of a safely potable character. During 1896 the water was "bad" (pathogenic) 33 per cent. of the time; "suspicious" 48 per cent., and "usable" or "good" only 19 per cent. of the time. (See *The City Water Supply*, p. 148 *et seq.*, ante; diagrams 185, 186, and tables pp. 190-214, *ibid.*) The effect is shown by the continuous black line of typhoid-fever deaths per 10 000 of population in each Ward during 1896.



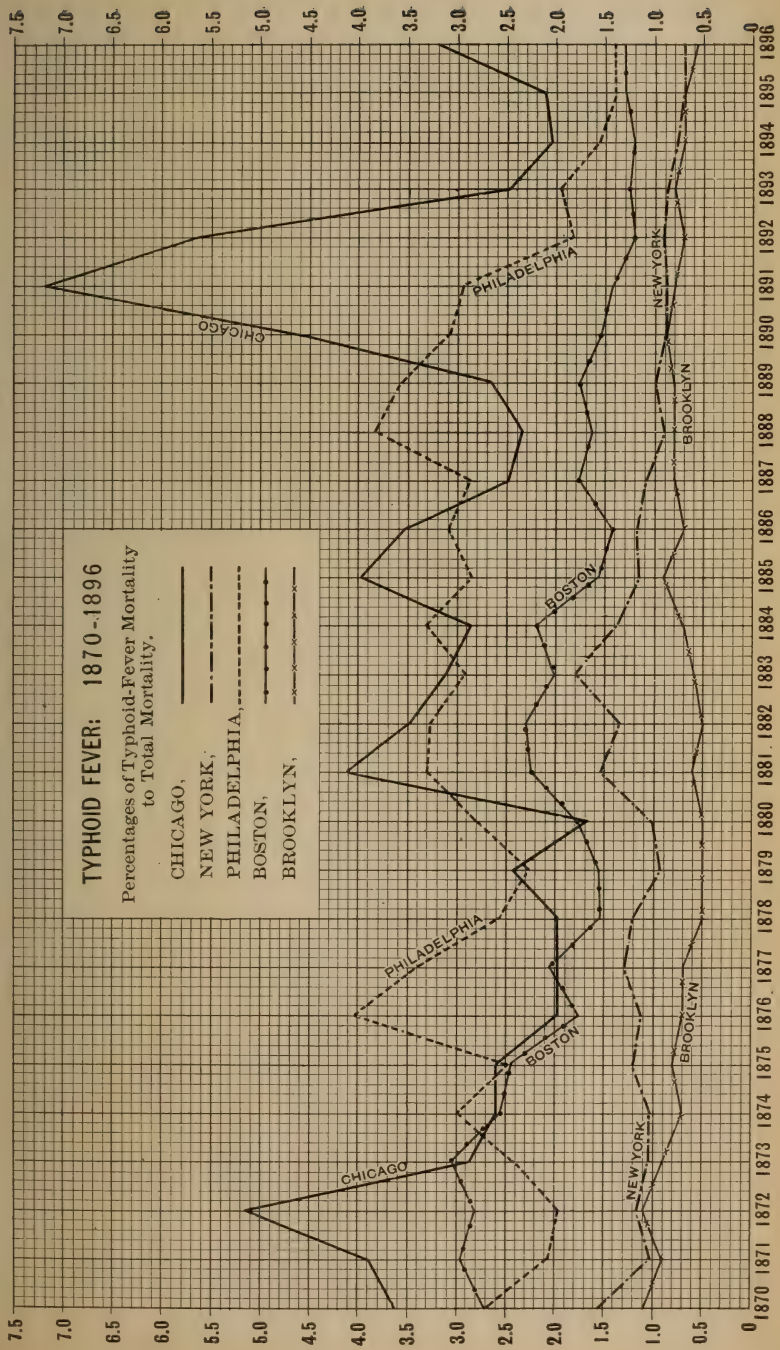
DRAKE

Horizontal rows of figures indicate the Wards. Vertical column of figures is the scale of deaths per 10 000 of population.

C. ST. C. DRAKE, M. D., ASSISTANT TO THE REGISTRAR OF VITAL STATISTICS.

EXTENSION OF DR. REYNOLDS' TYPHOID FEVER DIAGRAM OF 1894. BROOKLYN ADDED AND LINES EXTENDED TO THE YEAR 1896.

C. ST. C. DRAKE, M. D., Assistant to the Registrar of Vital Statistics.



During the summer of each year a considerable number of samples were collected from Lake Michigan direct. The city tug was used on days when time permitted and when the weather was favorable. The samples obtained were taken at different depths along imaginary lines running out from shore. Two or three samples were taken at each interval of one-half or one mile, and the depth of samples was at the bottom, midway and at the surface; or 10 feet from the bottom and 10 feet below the surface—the object being to determine the movement of the contaminated water and to determine the best position for the water ports in the intake cribs. Another object was to determine, if possible, as to the most satisfactory distance from shore to locate the new crib for the Oak-street tunnel. A temporary crib has been located about three miles from shore and from this point the tunnel is being extended shorewards. The final decision has been to extend this tunnel to four miles and locate the permanent crib at that distance. The accompanying table shows the results of a series of such analyses taken along the line of the proposed tunnel. The samples were all taken at a depth of 20 feet and the analyses indicate that contamination can easily extend ten or twelve miles from shore.

ANALYSIS OF LAKE MICHIGAN WATER: SAMPLES TAKEN AT MILE INTERVALS OFF SHORE, OCTOBER 23, 1896.

| Laboratory number of sample. | SOURCE OF SAMPLE. (Figures on a basis of parts per 100 000.) | Total solids. | Loss on ignition. | Non-volatile mineral solids. | Free ammonia. | Albuminoid ammonia. | Nitrogen as nitrates. | Nitrogen as nitrites. | Total nitrogen. | Oxygen consumed in 10 min. at 100° C. | Suspended matter. | Bacteria per cc. | Growth in 15% carbolic bouillon. | Kinds of pathogenic bacteria found. |
|------------------------------|---|---------------|-------------------|------------------------------|---------------|---------------------|-----------------------|-----------------------|-----------------|---------------------------------------|-------------------|------------------|----------------------------------|-------------------------------------|
| 2492 | One mile..... | 14.50 | 2.50 | 12.00 | .002 | .014 | None | None | .0128 | .170 | 2.14 | 4 000 | None | None |
| 2493 | Two miles..... | 13.80 | 3.10 | 10.70 | .002 | .011 | None | None | .0104 | .160 | 3.14 | 3 500 | None | None |
| 2494 | Three miles..... | 13.90 | 2.50 | 11.40 | .004 | .012 | None | None | .0128 | .180 | 2.00 | 4 100 | None | None |
| 2495 | Four miles..... | 13.00 | 1.80 | 11.20 | .001 | .009 | None | None | .0080 | .160 | 2.06 | 1 300 | None | None |
| 2496 | Five miles..... | 13.90 | 3.10 | 10.80 | .002 | .009 | None | None | .0088 | .160 | 2.34 | 13 500 | None | None |
| 2497 | Six miles..... | 14.40 | 3.70 | 10.70 | .003 | .008 | None | None | .0088 | .170 | 2.78 | 2 400 | None | None |
| 2498 | Seven miles..... | 14.20 | 2.90 | 11.30 | .001 | .008 | None | None | .0072 | .150 | 2.90 | 7 500 | None | None |
| 2499 | Eight miles..... | 13.20 | 1.70 | 11.50 | Trace | .008 | None | None | .0064 | .160 | 2.36 | 1 500 | None | None |
| 2500 | Nine miles..... | 13.50 | 2.50 | 11.00 | .002 | .008 | None | None | .0080 | .150 | 2.72 | 2 200 | None | None |
| 2501 | Ten miles..... | 13.20 | 2.40 | 10.80 | None | .009 | None | None | .0072 | .150 | 2.18 | 4 500 | None | None |
| 2502 | Eleven miles..... | 12.20 | 2.30 | 9.90 | None | .009 | None | None | .0072 | .160 | 2.26 | 5 000 | None | None |
| 2503 | Twelve miles..... | 13.00 | 2.40 | 10.60 | None | .008 | None | None | .0064 | .160 | 1.80 | 520 | None | None |

Meteorologic data:—Wind movement previous 24 hours, 315 miles. Direction of wind, west. Precipitation, none. Mean temperature, 43° F.

Owing to the fact that many requests are made for a mineral analysis of Lake Michigan water the following is given. The figures are in grains per U. S. gallon of 231 cubic inches :

| | |
|---------------------------------------|--------|
| Silica | .3504 |
| Carbonate of lime | 3.5003 |
| Carbonate of magnesia | 1.1679 |
| Sulphate of lime | 1.5936 |
| Sodium and potassium chlorides..... | 1.0327 |
| Sodium and potassium carbonates | .1571 |
| Iron and alumina..... | traces |
| <hr/> | |
| Total mineral solids..... | 7.8020 |

RESULTS OF DAILY EXAMINATIONS—CHEMIC AND BACTERIOLOGIC—
OF THE PUBLIC WATER SUPPLY OF CHICAGO DURING THE
YEAR 1896: ALSO CERTAIN METEOROLOGIC DATA.

| JANUARY. | SOURCE OF SAMPLES. PUMPING STATIONS. | Free Am- monia. | Albuminoid Ammonia. | Chlorine, | Oxygen cons., in 10 min. at 100° C. | Bacteria per cc. | Pathogenic Bacteria. | METEOROLOGIC DATA 24-HOUR PERIODS. * | | | |
|----------|---|--------------------|------------------------|-----------|---|---------------------|-------------------------|---|----------------|------------------------------|---------------|
| | | | | | | | | Wind move- ment. | Wind direc. | Precip- ita'n, inches. | Mean temp. |
| 2 | 14th Street | .001 | .010 | .70 | .190 | 760 | No | 490 | E | .04 | 24 |
| 2 | Chicago Avenue | .001 | .010 | .65 | .190 | 1 230 | Yes | | | | |
| 2 | Hyde Park | .001 | .011 | .70 | .180 | 3 100 | No | | | | |
| 2 | Lake View | .001 | .011 | .70 | .200 | 2 310 | No | | | | |
| 3 | 14th Street | .002 | .011 | .65 | .190 | 610 | No | 619 | W | Trace | Zero |
| 3 | Chicago Avenue | .001 | .011 | .70 | .190 | 2 400 | No | | N | | |
| 3 | Hyde Park | .001 | .011 | .70 | .190 | 3 600 | No | | W | | |
| 3 | Lake View | .001 | .011 | .70 | .190 | 1 910 | No | | | | |
| 4 | 14th Street | .001 | .001 | .70 | .180 | 560 | No | 411 | W | 0 | -2 |
| 4 | Chicago Avenue | .002 | .101 | .70 | .190 | 1 160 | No | | N | | |
| 4 | Hyde Park | .003 | .020 | .70 | .170 | 2 420 | No | | W | | |
| 4 | Lake View | .001 | .010 | .70 | .180 | 3 500 | No | | | | |
| 6 | 14th Street | .001 | .010 | .80 | .170 | 1 200 | No | 577 | W | .10 | 19 |
| 6 | Chicago Avenue | .001 | .010 | .75 | .170 | 1 460 | No | | | | |
| 6 | Hyde Park | Trace | .010 | .80 | .180 | 5 100 | No | | | | |
| 6 | Lake View | .001 | .010 | .80 | .210 | 1 400 | No | | | | |
| 7 | 14th Street | Trace | .010 | .80 | .190 | 740 | No | 356 | Se | 0 | 29 |
| 7 | Chicago Avenue | .001 | .014 | .70 | .190 | 1 200 | No | | | | |
| 7 | Hyde Park | .001 | .010 | .70 | .180 | 600 | No | | | | |
| 7 | Lake View | .018 | .016 | .75 | .180 | 2 650 | No | | | | |
| 8 | 14th Street | .001 | .010 | .70 | .180 | 420 | No | 435 | N | Trace | 28 |
| 8 | Chicago Avenue | .009 | .010 | .70 | .180 | 980 | No | | | | |
| 8 | Hyde Park | .009 | .010 | .70 | .180 | 1 210 | No | | | | |
| 8 | Lake View | .008 | .020 | .70 | .190 | 2 300 | No | | | | |
| 9 | 14th Street | .034 | .060 | .70 | .210 | 210 | No | 217 | Sw | 0 | 30 |
| 9 | Chicago Avenue | .040 | .050 | .80 | .310 | 1 300 | No | | | | |
| 9 | Hyde Park | .030 | .050 | .80 | .210 | 2 200 | No | | | | |
| 9 | Lake View | .022 | .030 | .75 | .230 | 2 410 | No | | | | |
| 10 | 14th Street | .018 | .050 | .70 | .240 | 1 000 | No | 381 | E | 0 | 34 |
| 10 | Chicago Avenue | .038 | .056 | .75 | .250 | 960 | No | | | | |
| 10 | Hyde Park | .006 | .050 | .70 | .340 | 3 110 | No | | | | |
| 10 | Lake View | .004 | .040 | .80 | .360 | 1 940 | No | | | | |
| 11 | 14th Street | .004 | .040 | .75 | .360 | 570 | No | 595 | Se | 0 | 34 |
| 11 | Chicago Avenue | .003 | .060 | .75 | .380 | 2 400 | No | | | | |
| 11 | Hyde Park | .004 | .040 | .75 | .380 | 1 140 | No | | | | |
| 11 | Lake View | .003 | .040 | .65 | .290 | 2 000 | No | | | | |
| 13 | 14th Street | .001 | .010 | .65 | .190 | 920 | No | 346 | W | 0 | 19 |
| 13 | Chicago Avenue | .001 | .008 | .70 | .190 | 840 | No | | | | |
| 13 | Hyde Park | .001 | .010 | .70 | .180 | 1 280 | No | | | | |
| 13 | Lake View | .001 | .008 | .70 | .190 | 2 560 | No | | | | |
| 14 | 14th Street | .001 | .001 | .70 | .170 | 910 | No | 233 | W | 0 | 22 |
| 14 | Chicago Avenue | .001 | .001 | .75 | .150 | 1 370 | No | | | | |
| 14 | Hyde Park | .001 | .001 | .70 | .160 | 3 400 | No | | | | |
| 14 | Lake View | .001 | .001 | .75 | .180 | 2 880 | No | | | | |
| 15 | 14th Street | .001 | .001 | .75 | .170 | 670 | No | 302 | Nw | Trace | 28 |
| 15 | Chicago Avenue | .001 | .002 | .75 | .160 | 1 140 | No | | | | |
| 15 | Hyde Park | .001 | .001 | .75 | .160 | 1 600 | No | | | | |
| 15 | Lake View | .001 | .001 | .75 | .160 | 1 420 | No | | | | |
| 16 | 14th Street | .001 | .001 | .75 | .150 | 520 | No | 232 | Se | 0 | 32 |
| 16 | Chicago Avenue | .001 | .001 | .80 | .150 | 800 | No | | | | |
| 16 | Hyde Park | .001 | .001 | .75 | .150 | 1 120 | No | | | | |
| 16 | Lake View | .001 | .001 | .80 | .150 | 3 290 | No | | | | |

* See "Note," foot of page 193.

RESULTS OF DAILY EXAMINATIONS—*Continued.*

| JANUARY. | SOURCE OF SAMPLES. PUMPING STATIONS. | Free Ammonia. | Albuminoid Ammonia. | Chlorine. | Oxygen cons. in 10 min. at 100° C. | Bacteria per cc. | Pathogenic Bacteria. | METEOROLOGIC DATA 24-HOUR PERIODS. | | | |
|----------|---|---------------|---------------------|-----------|------------------------------------|------------------|----------------------|---------------------------------------|-------------|------------------------|------------|
| | | | | | | | | Wind movement. | Wind direc. | Precipitation, inches. | Mean temp. |
| 17 | 14th Street | .001 | .001 | .80 | .260 | 400 | No | 178 | S | Trace | 36 |
| 17 | Chicago Avenue | .020 | .001 | .80 | .250 | 1 200 | No | | E | | |
| 17 | Hyde Park | .001 | .001 | .75 | .210 | 2 310 | No | | W | | |
| 17 | Lake View | .001 | .001 | .75 | .280 | 3 460 | No | | | | |
| 18 | 14th Street | .030 | .010 | .80 | .190 | 530 | No | 340 | Ne | .08 | 33 |
| 18 | Chicago Avenue | .060 | .011 | .80 | .190 | 1 760 | No | | E | | |
| 18 | Hyde Park | .020 | .002 | .75 | .210 | 970 | No | | | | |
| 18 | Lake View | .020 | .012 | .80 | .210 | 2 920 | No | | | | |
| 20 | 14th Street | .001 | .002 | .80 | .190 | 600 | No | 326 | W | 0 | 34 |
| 20 | Chicago Avenue | .001 | .002 | .80 | .190 | 2 000 | No | | | | |
| 20 | Hyde Park | .001 | .002 | .75 | .180 | 1 030 | No | | | | |
| 20 | Lake View | .001 | .002 | .80 | .180 | 950 | No | | | | |
| 21 | 14th Street | .020 | .010 | .75 | .190 | 520 | No | 410 | N | 0 | 31 |
| 21 | Chicago Avenue | .036 | .020 | .80 | .190 | 2 400 | No | | | | |
| 21 | Hyde Park | .030 | .010 | .80 | .170 | 1 630 | No | | | | |
| 21 | Lake View | .036 | .014 | .80 | .180 | 3 400 | No | | | | |
| 22 | 14th Street | .001 | .008 | .75 | .120 | 1 400 | No | 660 | E | .01 | 28 |
| 22 | Chicago Avenue | .002 | .010 | .75 | .100 | 3 900 | No | | | | |
| 22 | Hyde Park | .001 | .008 | .75 | .280 | 2 630 | No | | | | |
| 22 | Lake View | .001 | .010 | .80 | .190 | 4 250 | No | | | | |
| 23 | 14th Street | .001 | .006 | .70 | .180 | 1 810 | No | 309 | N | .58 | 32 |
| 23 | Chicago Avenue | .001 | .006 | .80 | .190 | 3 600 | No | | Ne | | |
| 23 | Hyde Park | .001 | .001 | .80 | .190 | 3 420 | No | | | | |
| 23 | Lake View | .001 | .005 | .80 | .190 | 2 200 | No | | | | |
| 24 | 14th Street | .001 | .005 | .70 | .200 | 1 960 | No | 345 | N | .03 | 36 |
| 24 | Chicago Avenue | .001 | .002 | .80 | .180 | 4 750 | No | | | | |
| 24 | Hyde Park | .014 | .006 | .80 | .180 | 3 160 | No | | | | |
| 24 | Lake View | .010 | .005 | .80 | .190 | 2 370 | No | | | | |
| 25 | 14th Street | .001 | .001 | .70 | .210 | 2 400 | No | 279 | Nw | .01 | 32 |
| 25 | Chicago Avenue | .001 | .001 | .65 | .150 | 5 900 | No | | | | |
| 25 | Hyde Park | .001 | .001 | .65 | .160 | 4 110 | No | | | | |
| 25 | Lake View | .001 | .001 | .70 | .110 | 3 640 | No | | | | |
| 27 | 14th Street | .001 | .001 | .65 | .160 | 1 250 | No | 387 | Sw | 0 | 32 |
| 27 | Chicago Avenue | .001 | .001 | .70 | .150 | 1 400 | No | | | | |
| 27 | Hyde Park | .001 | .001 | .70 | .150 | 4 630 | No | | | | |
| 27 | Lake View | .001 | .001 | .65 | .150 | 1 420 | No | | | | |
| 28 | 14th Street | .001 | .001 | .65 | .150 | 910 | No | 476 | S | 0 | 30 |
| 28 | Chicago Avenue | .001 | .001 | .70 | .150 | 690 | No | | | | |
| 28 | Hyde Park | .001 | .001 | .65 | .140 | 1 740 | No | | | | |
| 28 | Lake View | .001 | .001 | .70 | .160 | 1 320 | No | | | | |
| 29 | 14th Street | .001 | .001 | .70 | .240 | 560 | No | 262 | Sw | 0 | 38 |
| 29 | Chicago Avenue | .001 | .002 | .70 | .160 | 970 | No | | | | |
| 29 | Hyde Park | .002 | .001 | .70 | .160 | 1 200 | No | | | | |
| 29 | Lake View | .001 | .001 | .70 | .160 | 1 740 | No | | | | |
| 30 | 14th Street | .001 | .001 | .70 | .150 | 410 | No | 177 | S | 0 | 44 |
| 30 | Chicago Avenue | .001 | .001 | .70 | .200 | 860 | No | | | | |
| 30 | Hyde Park | .001 | .001 | .70 | .150 | 1 100 | No | | | | |
| 30 | Lake View | .001 | .001 | .70 | .150 | 1 340 | No | | | | |
| 31 | 14th Street | .001 | .001 | .70 | .160 | 160 | No | 364 | S | .20 | 40 |
| 31 | Chicago Avenue | .001 | .008 | .70 | .180 | 250 | No | | | | |
| 31 | Hyde Park | .002 | .001 | .70 | .160 | 940 | No | | | | |
| 31 | Lake View | .001 | .008 | .70 | .130 | 1 600 | No | | | | |

RESULTS OF DAILY EXAMINATIONS—Continued.

| FEBRUARY. | SOURCE OF SAMPLES. PUMPING STATIONS. | Free Am- monia. | Albuminoid Ammonia. | Chlorine. | Oxygen cons. in 10 min. at 100° C. | Bacteria per cc. | Pathogenic Bacteria. | METEOROLOGIC DATA 24-HOUR PERIODS. | | | |
|-----------|---|--------------------|------------------------|-----------|--|---------------------|-------------------------|---------------------------------------|----------------|------------------------------|---------------|
| | | | | | | | | Wind move- ment. | Wind direc. | Precip- ita'n, inches. | Mean temp. |
| 1 | 14th Street | .001 | .001 | .70 | .150 | 120 | No | 387 | W | .01 | 34 |
| 1 | Chicago Avenue | .001 | .001 | .75 | .400 | 680 | No | | | | |
| 1 | Hyde Park | .001 | .001 | .75 | .120 | 940 | No | | | | |
| 1 | Lake View | .001 | .001 | .70 | .180 | 1 200 | No | | | | |
| 3 | 14th Street | .006 | .008 | .70 | .180 | 180 | No | 586 | Ne | 1.52 | 31 |
| 3 | Chicago Avenue | .006 | .016 | .70 | .210 | 1 320 | No | | | | |
| 3 | Hyde Park | .002 | .010 | .70 | .210 | 820 | No | | | | |
| 3 | Lake View | .002 | .070 | .70 | .210 | 970 | No | | | | |
| 4 | 14th Street | .001 | .005 | .70 | .180 | 150 | No | 264 | Nw | .15 | 30 |
| 4 | Chicago Avenue | .002 | .010 | .70 | .360 | 1 300 | No | | | | |
| 4 | Hyde Park | .004 | .016 | .70 | .280 | 910 | No | | | | |
| 4 | Lake View | .002 | .012 | .70 | .480 | 800 | No | | | | |
| 5 | 14th Street | .001 | .006 | .70 | .180 | 170 | No | 228 | W | 0 | 28 |
| 5 | Chicago Avenue | .002 | .008 | .70 | .230 | 1 150 | No | | | | |
| 5 | Hyde Park | .002 | .010 | .70 | .200 | 920 | No | | | | |
| 5 | Lake View | .002 | .010 | .70 | .200 | 910 | No | | | | |
| 6 | 14th Street | .002 | .003 | .65 | .160 | 240 | No | 349 | N | 0 | 30 |
| 6 | Chicago Avenue | .002 | .004 | .70 | .160 | 850 | No | | | | |
| 6 | Hyde Park | .002 | .004 | .70 | .180 | 900 | No | | | | |
| 6 | Lake View | .004 | .008 | .70 | .220 | 1 120 | No | | | | |
| 7 | 14th Street | .002 | .008 | .70 | .180 | 480 | No | 339 | W | 0 | 26 |
| 7 | Chicago Avenue | .002 | .008 | .70 | .180 | 5 000 | No | | | | |
| 7 | Hyde Park | .002 | .006 | .70 | .120 | 300 | No | | | | |
| 7 | Lake View | .002 | .006 | .70 | .160 | 9 520 | No | | | | |
| 8 | 14th Street | .002 | .014 | .65 | .170 | 2 400 | No | 250 | W | Trace | 26 |
| 8 | Chicago Avenue | .004 | .012 | .70 | .180 | 295 | No | | | | |
| 8 | Hyde Park | .002 | .006 | .65 | .260 | 280 | No | | | | |
| 8 | Lake View | .002 | .006 | .70 | .190 | 256 | No | | | | |
| 10 | 14th Street | .004 | .008 | .70 | .130 | 1 260 | No | 699 | Sw | .01 | 30 |
| 10 | Chicago Avenue | .004 | .008 | .70 | .100 | 2 700 | No | | | | |
| 10 | Hyde Park | .002 | .006 | .70 | .130 | 320 | No | | | | |
| 10 | Lake View | .004 | .014 | .70 | .120 | 460 | No | | | | |
| 11 | 14th Street | .002 | .008 | .70 | .120 | 900 | No | 692 | W Ne | 0 | 24 |
| 11 | Chicago Avenue | .002 | .004 | .70 | .180 | 1 740 | No | | | | |
| 11 | Hyde Park | .002 | .004 | .70 | .250 | 530 | No | | | | |
| 11 | Lake View | .002 | .004 | .70 | .130 | 790 | No | | | | |
| 13 | 14th Street | .002 | .004 | .70 | .230 | 1 430 | No | 547 | S | .60 | 22 |
| 13 | Chicago Avenue | .002 | .012 | .75 | .259 | 12 800 | No | | | | |
| 13 | Hyde Park | .002 | .004 | .70 | .110 | 760 | No | | | | |
| 13 | Lake View | .002 | .004 | .70 | .200 | 1 340 | No | | | | |
| 14 | 14th Street | .002 | .007 | .70 | .200 | 1 720 | No | 445 | Sw | 0 | 28 |
| 14 | Chicago Avenue | .004 | .090 | .70 | 1 060 | 10 900 | No | | | | |
| 14 | Hyde Park | .006 | .010 | .70 | .190 | 2 800 | No | | | | |
| 14 | Lake View | .004 | .006 | .70 | .170 | 1 630 | No | | | | |
| 15 | 14th Street | .003 | .008 | .70 | .160 | 2 840 | No | 639 | N | .02 | 28 |
| 15 | Chicago Avenue | .002 | .004 | .70 | .200 | 2 610 | No | | | | |
| 15 | Hyde Park | .008 | .020 | .70 | .190 | 12 900 | Yes | | | | |
| 15 | Lake View | .004 | .010 | .70 | .200 | 17 460 | Yes | | | | |
| 17 | 14th Street | .002 | .004 | .65 | .140 | 1 000 | No | 434 | W | .06 | 15 |
| 17 | Chicago Avenue | .002 | .010 | .70 | .260 | 1 910 | Yes | | | | |
| 17 | Hyde Park | .002 | .006 | .70 | .150 | 6 240 | No | | | | |
| 17 | Lake View | .002 | .006 | .70 | .120 | 4 500 | Yes | | | | |

RESULTS OF DAILY EXAMINATIONS—*Continued.*

| FEBRUARY. | SOURCE OF SAMPLES. PUMPING STATIONS. | Free Am- monia. | Albuminoid Ammonia. | Chlorine. | Oxygen cons. in 10 min. at 100° C. | Bacteria per cc. | Pathogenic Bacteria. | METEOROLOGIC DATA 24-HOUR PERIODS. | | | |
|-----------|---|--------------------|------------------------|-----------|--|---------------------|-------------------------|---------------------------------------|----------------|------------------------------|---------------|
| | | | | | | | | Wind move- ment. | Wind direc. | Precip- ita'n, inches. | Mean temp. |
| 18 | 14th Street..... | Trace | .001 | .65 | .100 | 650 | Yes | 608 | Nw | .17 | 19 |
| 18 | Chicago Avenue..... | .002 | .008 | .70 | .150 | 920 | Yes | | | | |
| 18 | Hyde Park..... | .001 | .005 | .70 | .130 | 2 400 | Yes | | | | |
| 18 | Lake View..... | .002 | .002 | .70 | .110 | 1 370 | Yes | | | | |
| 19 | 14th Street..... | Trace | Trace | .60 | .160 | 220 | No | 600 | Nw | .03 | 3 |
| 19 | Chicago Avenue..... | Trace | .001 | .60 | .230 | 900 | No | | | | |
| 19 | Hyde Park..... | Trace | .001 | .60 | .160 | 1 200 | No | | | | |
| 19 | Lake View..... | .002 | Trace | .70 | .240 | 2 460 | No | | | | |
| 20 | 14th Street..... | Trace | Trace | .60 | .180 | 130 | No | 428 | W | 0 | 1 |
| 20 | Chicago Avenue..... | Trace | Trace | .60 | .180 | 690 | No | | | | |
| 20 | Hyde Park..... | Trace | Trace | .60 | .170 | 870 | No | | | | |
| 20 | Lake View..... | Trace | Trace | .60 | .170 | 740 | No | | | | |
| 21 | 14th Street..... | .003 | .002 | .60 | .190 | 260 | No | 360 | Sw | 0 | 8 |
| 21 | Chicago Avenue..... | .002 | .001 | .60 | .190 | 970 | No | | | | |
| 21 | Hyde Park..... | Trace | .003 | .70 | .230 | 250 | No | | | | |
| 21 | Lake View..... | .002 | .004 | .60 | .260 | 540 | No | | | | |
| 24 | 14th Street..... | .001 | .002 | .60 | .130 | 800 | No | 368 | Sw | 0 | 34 |
| 24 | Chicago Avenue..... | .002 | .002 | .60 | .180 | 1 152 | No | | | | |
| 24 | Hyde Park..... | Trace | .003 | .70 | .160 | 360 | No | | | | |
| 24 | Lake View..... | .002 | .006 | .70 | .150 | 4 500 | No | | | | |
| 25 | 14th Street..... | Trace | Trace | .60 | .150 | 610 | No | 507 | S | Trace | 34 |
| 25 | Chicago Avenue..... | Trace | .003 | .60 | .180 | 1 000 | No | | | | |
| 25 | Hyde Park..... | .001 | Trace | .65 | .200 | 530 | No | | | | |
| 25 | Lake View..... | Trace | Trace | .70 | .160 | 2,100 | No | | | | |
| 26 | 14th Street..... | Trace | Trace | .60 | .190 | 290 | No | 379 | Sw | 0 | 42 |
| 26 | Chicago Avenue..... | Trace | .001 | .70 | .180 | 1 100 | No | | | | |
| 26 | Hyde Park..... | Trace | Trace | .65 | .160 | 730 | No | | | | |
| 26 | Lake View..... | Trace | .001 | .65 | .180 | 860 | No | | | | |
| 27 | 14th Street..... | .014 | .108 | .60 | .140 | 180 | No | 593 | N | 0 | 50 |
| 27 | Chicago Avenue..... | Trace | .074 | .65 | .180 | 780 | No | | | | |
| 27 | Hyde Park..... | Trace | .130 | .60 | .180 | 820 | No | | | | |
| 27 | Lake View..... | Trace | .030 | .70 | .160 | 670 | No | | | | |
| 28 | 14th Street..... | Trace | Trace | .60 | .140 | 200 | No | 392 | N | 0 | 38 |
| 28 | Chicago Avenue..... | Trace | Trace | .60 | .200 | 520 | No | | | | |
| 28 | Hyde Park..... | Trace | Trace | .60 | .160 | 720 | No | | | | |
| 28 | Lake View..... | Trace | Trace | .70 | .160 | 460 | No | | | | |
| 29 | 14th Street..... | Trace | Trace | .70 | .160 | 170 | No | 731 | Sw | 0 | 28 |
| 29 | Chicago Avenue..... | Trace | .002 | .65 | .140 | 920 | No | | | | |
| 29 | Hyde Park..... | Trace | .002 | .60 | .180 | 870 | No | | | | |
| 29 | Lake View..... | Trace | .002 | .70 | .140 | 420 | No | | | | |

NOTE—The "meteorologic data" embrace, 1st, the total wind movement in miles for each 24-hour period of the dates given; 2d, the prevailing direction of the wind for the same period, and where more than one initial letter is given it signifies that the wind was changeable—as, for example, "January 3, W N W," the wind changed from west to north and back to west during the 24 hours; 3d, rainfall or precipitation in inches for the same period; and 4th, the mean temperature of the 24 hours in degrees Fahrenheit.

RESULTS OF DAILY EXAMINATIONS—*Continued.*

| MARCH. | SOURCE OF SAMPLES. PUMPING STATIONS. | Free Am- monia. | Albuminoid Ammonia. | Chlorine. | Oxygen cons. in 10 min. at 100° C. | Bacteria per cc. | Pathogenic Bacteria. | METEOROLOGIC DATA 24-HOUR PERIODS. | | | | |
|--------|---|--------------------|------------------------|-----------|--|---------------------|-------------------------|---------------------------------------|----------------|------------------------------|---------------|--|
| | | | | | | | | Wind Move- ment. | Wind direc. | Precip- ita n, inches. | Mean temp. | |
| 2 | 14th Street | Trace | .002 | .70 | .110 | 420 | No | 391 | N | | 21 | |
| 2 | Chicago Avenue | Trace | Trace | .65 | .130 | 320 | No | | | | | |
| 2 | Hyde Park | .001 | .006 | .70 | .290 | 1 020 | No | | | | | |
| 2 | Lake View | Trace | Trace | .60 | .130 | 240 | No | | | | | |
| 3 | 14th Street | .004 | .004 | .60 | .130 | 150 | No | 543 | N | | 26 | |
| 3 | Chicago Avenue | .002 | .002 | .60 | .150 | ..... | No | | | | | |
| 3 | Hyde Park | .002 | .002 | .60 | .160 | 1 760 | No | | | | | |
| 3 | Lake View | .002 | .002 | .70 | .130 | 200 | No | | | | | |
| 4 | 14th Street | .006 | .006 | .60 | .160 | 720 | No | 510 | N | | 27 | |
| 4 | Chicago Avenue | .002 | .006 | .70 | .170 | 840 | No | | | | | |
| 4 | Hyde Park | .002 | .006 | .60 | .160 | 640 | No | | | | | |
| 4 | Lake View | .002 | .002 | .65 | .140 | 320 | No | | | | | |
| 5 | 14th Street | .002 | .004 | .60 | .160 | 832 | No | 780 | S | .02 | 31 | |
| 5 | Chicago Avenue | Trace | .004 | .60 | .180 | 24 | No | | | | | |
| 5 | Hyde Park | .001 | .001 | .55 | .140 | 2 400 | Yes | | | | | |
| 5 | Lake View | Trace | .003 | .60 | .160 | 2 400 | No | | | | | |
| 6 | 14th Street | .012 | .048 | .70 | .130 | 64 | No | 399 | W | .12 | 36 | |
| 6 | Chicago Avenue | .002 | .062 | .70 | .160 | 960 | No | | | | | |
| 6 | Hyde Park | .014 | .058 | .70 | .130 | 3 200 | No | | | | | |
| 6 | Lake View | .016 | .042 | .65 | .180 | 102 | No | | | | | |
| 7 | 14th Street | Trace | .002 | .70 | .130 | 25 | No | 541 | W | Trace | 28 | |
| 7 | Chicago Avenue | Trace | Trace | .70 | .120 | 8 000 | Yes | | | | | |
| 7 | Hyde Park | Trace | Trace | .70 | .120 | 3 600 | No | | | | | |
| 7 | Lake View | Trace | Trace | .70 | .110 | 3 200 | No | | | | | |
| 9 | 14th Street | Trace | .004 | .70 | .110 | 960 | No | 317 | S | Trace | 32 | |
| 9 | Chicago Avenue | Trace | .001 | .65 | .100 | 1 920 | No | | | | | |
| 9 | Hyde Park | .002 | .003 | .65 | .110 | 792 | No | | | | | |
| 9 | Lake View | Trace | Trace | .70 | .100 | 1 240 | No | | | | | |
| 10 | 14th Street | Trace | .001 | .65 | .110 | 768 | No | 363 | N | Trace | 31 | |
| 10 | Chicago Avenue | Trace | .004 | .70 | .170 | 150 | No | | | | | |
| 10 | Hyde Park | Trace | .008 | .70 | .210 | 3 520 | No | | | | | |
| 10 | Lake View | Trace | Trace | .65 | .120 | 800 | No | | | | | |
| 11 | 14th Street | Trace | .008 | .70 | .120 | 900 | No | 583 | N | .30 | 18 | |
| 11 | Chicago Avenue | Trace | .008 | .70 | .160 | 180 | No | | | | | |
| 11 | Hyde Park | Trace | .006 | .70 | .140 | 560 | No | | | | | |
| 11 | Lake View | Trace | .008 | .70 | .160 | 900 | No | | | | | |
| 12 | 14th Street | Trace | .001 | .65 | .130 | 6 800 | No | 398 | Nw | Trace | 10 | |
| 12 | Chicago Avenue | .001 | .008 | .70 | .220 | 100 | No | | | | | |
| 12 | Hyde Park | Trace | .001 | .60 | .120 | 400 | No | | | | | |
| 12 | Lake View | Trace | .001 | .70 | .110 | 360 | No | | | | | |
| 13 | 14th Street | Trace | .002 | .70 | .120 | 500 | No | 248 | W | | 14 | |
| 13 | Chicago Avenue | Trace | .002 | .70 | .110 | 500 | No | | | | | |
| 13 | Hyde Park | Trace | .002 | .70 | .140 | 790 | No | | | | | |
| 13 | Lake View | Trace | .006 | .70 | .140 | 400 | No | | | | | |
| 14 | 14th Street | Trace | .001 | .60 | .120 | 360 | No | 180 | S | | 20 | |
| 14 | Chicago Avenue | .001 | .001 | .70 | .170 | 640 | No | | | | | |
| 14 | Hyde Park | .001 | .001 | .60 | .120 | 1 000 | No | | | | | |
| 14 | Lake View | Trace | .006 | .65 | .160 | 840 | No | | | | | |
| 16 | 14th Street | Trace | .002 | .60 | .120 | 50 | No | 169 | W | Trace | 30 | |
| 16 | Chicago Avenue | Trace | .001 | .70 | .130 | 8 000 | No | | | | | |
| 16 | Hyde Park | .001 | .001 | .65 | .120 | 1 600 | No | | | | | |
| 16 | Lake View | Trace | .001 | .65 | .120 | 384 | No | | | | | |

RESULTS OF DAILY EXAMINATIONS—*Continued.*

| MARCH. | SOURCE OF PUMPING STATIONS. | Free Am- monia. | Albuminoid Ammonia. | Chlorine. | Oxygen cons. in 10 min. at 100° C. | Bacteria per cc. | Pathogenic Bacteria. | METEOROLOGIC DATA 24-HOUR PERIODS. | | | |
|--------|-----------------------------------|--------------------|------------------------|-----------|--|---------------------|-------------------------|---------------------------------------|----------------|--------------------------------|---------------|
| | | | | | | | | Wind move- ment. | Wind direc. | Precip- ita't'n, inches. | Mean temp. |
| 17 | 14th Street | .001 | .004 | .70 | .120 | 192 | No | 280 | W | Trace | 33 |
| 17 | Chicago Avenue | Trace | .004 | .70 | .110 | 12 800 | No | | | | |
| 17 | Hyde Park | Trace | .002 | .65 | .110 | 4 000 | No | | | | |
| 17 | Lake View | .002 | .006 | .65 | .100 | 4 800 | No | | | | |
| 18 | 14th Street | Trace | .002 | .70 | .130 | 40 | No | 257 | S | .05 | 34 |
| 18 | Chicago Avenue | Trace | .004 | .70 | .150 | 32 000 | No | | | | |
| 18 | Hyde Park | Trace | .004 | .70 | .150 | 2 048 | No | | | | |
| 18 | Lake View | Trace | .004 | .65 | .260 | 1 600 | No | | | | |
| 19 | 14th Street | Trace | .001 | .60 | .150 | 20 | No | 612 | N | .09 | 30 |
| 19 | Chicago Avenue | .001 | .006 | .70 | .210 | 2 000 | No | | | | |
| 19 | Hyde Park | .002 | .004 | .65 | .130 | 9 600 | Yes | | | | |
| 19 | Lake View | Trace | .001 | .60 | .140 | 4 800 | No | | | | |
| 20 | 14th Street | Trace | .004 | .65 | .180 | 2 700 | No | 382 | S | | 28 |
| 20 | Chicago Avenue | .001 | .004 | .70 | .180 | 3 200 | No | | | | |
| 20 | Hyde Park | .002 | .004 | .65 | .100 | ..... | No | | | | |
| 20 | Lake View | .002 | .001 | .60 | .240 | 2 600 | Yes | | | | |
| 21 | 14th Street | Trace | .004 | .60 | .130 | 2 000 | No | 812 | S | | 42 |
| 21 | Chicago Avenue | Trace | .008 | .70 | .150 | 2 200 | No | | | | |
| 21 | Hyde Park | Trace | .004 | .70 | .110 | 1 400 | No | | | | |
| 21 | Lake View | Trace | .002 | .60 | .140 | 1 120 | No | | | | |
| 23 | 14th Street | Trace | .006 | .65 | .130 | 320 | No | 310 | Ne | | 26 |
| 23 | Chicago Avenue | Trace | .006 | .70 | .140 | 9 600 | No | | | | |
| 23 | Hyde Park | Trace | .004 | .60 | .130 | 1 900 | No | | | | |
| 23 | Lake View | Trace | .002 | .60 | .100 | 960 | No | | | | |
| 24 | 14th Street | Trace | .004 | .60 | .120 | 6 720 | No | 576 | S | 0 | 34 |
| 24 | Chicago Avenue | Trace | .004 | .70 | .110 | 2 406 | No | | | | |
| 24 | Hyde Park | Trace | .002 | .70 | .200 | 256 | No | | | | |
| 24 | Lake View | Trace | .004 | .65 | .210 | 15 000 | No | | | | |
| 25 | 14th Street | Trace | Trace | .65 | .150 | 160 | No | 865 | Sw | Trace | 46 |
| 25 | Chicago Avenue | .001 | .70 | .200 | 1 200 | No | | | | | |
| 25 | Hyde Park | Trace | .001 | .70 | .170 | 15 000 | No | | | | |
| 25 | Lake View | Trace | .001 | .70 | .170 | 2 240 | Yes | | | | |
| 26 | 14th Street | Trace | .001 | .70 | .170 | 1 500 | No | 430 | N | Trace | 28 |
| 26 | Chicago Avenue | Trace | .001 | .70 | .140 | 150 | No | | | | |
| 26 | Hyde Park | Trace | .002 | .70 | .140 | 1 400 | No | | | | |
| 26 | Lake View | Trace | .002 | .70 | .140 | 1 550 | No | | | | |
| 27 | 14th Street | Trace | .009 | .60 | .220 | 3 200 | No | 403 | Se | | 32 |
| 27 | Chicago Avenue | Trace | .004 | .65 | .190 | 1 200 | No | | | | |
| 27 | Hyde Park | .001 | .004 | .60 | .130 | 1 200 | No | | | | |
| 27 | Lake View | .001 | .004 | .60 | .150 | 2 000 | No | | | | |
| 28 | 14th Street | Trace | .004 | .60 | .170 | 8 800 | No | 741 | Se | .09 | 46 |
| 28 | Chicago Avenue | Trace | .008 | .70 | .200 | 1 408 | No | | | | |
| 28 | Hyde Park | Trace | .002 | .65 | .130 | 10 000 | No | | | | |
| 28 | Lake View | Trace | .004 | .65 | .200 | 12 000 | No | | | | |
| 30 | 14th Street | Trace | .002 | .60 | .140 | 250 | No | 278 | W | 0 | 46 |
| 30 | Chicago Avenue | Trace | .002 | .60 | .160 | 80 | No | | | | |
| 30 | Hyde Park | Trace | .004 | .65 | .170 | 1 600 | No | | | | |
| 30 | Lake View | Trace | .004 | .65 | .180 | 15 000 | No | | | | |
| 31 | 14th Street | Trace | .001 | .65 | .140 | 2 000 | No | 493 | Se | 0 | 50 |
| 31 | Chicago Avenue | .001 | .002 | .70 | .130 | 8 000 | No | | | | |
| 31 | Hyde Park | .001 | .003 | .65 | .140 | 5 400 | No | | | | |
| 31 | Lake View | .001 | .002 | .75 | .200 | 6 400 | No | | | | |

RESULTS OF DAILY EXAMINATIONS—*Continued.*

| APRIL. | SOURCE OF SAMPLES. PUMPING STATIONS. | Free Ammonia. | Albuminoid Ammonia. | Chlorine. | Oxygen cons. in 10 min. at 100° C. | Bacteria per cc. | Pathogenic Bacteria. | METEOROLOGIC DATA 24-HOUR PERIODS. | | | |
|--------|---|---------------|---------------------|-----------|------------------------------------|------------------|----------------------|---------------------------------------|--------------|------------------------|------------|
| | | | | | | | | Wind movement. | Wind direc. | Precipitation, inches. | Mean temp. |
| 1 | 14th Street | .001 | .004 | .60 | .120 | 6 40 | No | 804 | W | Trace | 44 |
| 1 | Chicago Avenue | Trace | .006 | .70 | .120 | 4 000 | No | | | | |
| 1 | Hyde Park | Trace | .001 | .65 | .100 | 2 000 | No | | | | |
| 1 | Lake View | Trace | .006 | .65 | .170 | 16 000 | No | | | | |
| 2 | 14th Street | .001 | .008 | .65 | .140 | 8 000 | No | 645 | Nw | Trace | 25 |
| 2 | Chicago Avenue | Trace | .002 | .70 | .120 | 16 000 | No | | | | |
| 2 | Hyde Park | Trace | .001 | .65 | .130 | 4 800 | No | | | | |
| 2 | Lake View | .001 | .008 | .70 | .220 | 80 | No | | | | |
| 3 | 14th Street | Trace | .005 | .60 | .180 | 16 000 | No | 407 | Nw | 0 | 34 |
| 3 | Chicago Avenue | Trace | .008 | .70 | .170 | 1 280 | No | | | | |
| 3 | Hyde Park | .001 | .004 | .70 | .250 | 15 000 | No | | | | |
| 3 | Lake View | Trace | .008 | .70 | .280 | 9 600 | No | | | | |
| 4 | 14th Street | .001 | .004 | .65 | .160 | 32 000 | No | 266 | E | 0 | 33 |
| 4 | Chicago Avenue | Trace | .008 | .80 | .110 | 200 | No | | | | |
| 4 | Hyde Park | Trace | .006 | .65 | .160 | 6 400 | No | | | | |
| 4 | Lake View | Trace | .008 | .65 | .190 | 6 400 | No | | | | |
| 6 | 14th Street | Trace | .001 | .65 | .170 | 14 400 | No | 238 | N | 0 | 41 |
| 6 | Chicago Avenue | Trace | .004 | .70 | .130 | 140 | No | | | | |
| 6 | Hyde Park | Trace | .002 | .75 | .130 | 3 160 | No | | | | |
| 6 | Lake View | Trace | .002 | .70 | .130 | 3 960 | No | | | | |
| 7 | 14th Street | Trace | .002 | .70 | .120 | 3 700 | No | 512 | N | 0 | 32 |
| 7 | Chicago Avenue | Trace | .004 | .70 | .130 | 48 000 | No | | | | |
| 7 | Hyde Park | Trace | .004 | .70 | .120 | 5 000 | No | | | | |
| 7 | Lake View | Trace | .004 | .70 | .160 | 9 000 | No | | | | |
| 8 | 14th Street | .001 | .004 | .65 | .130 | 4 480 | No | 732 | Se | 0 | 36 |
| 8 | Chicago Avenue | Trace | .003 | .70 | .110 | 16 000 | No | | | | |
| 8 | Hyde Park | Trace | .002 | .60 | .130 | 1 340 | No | | | | |
| 8 | Lake View | .002 | .004 | .75 | .130 | 1 920 | No | | | | |
| 9 | 14th Street | Trace | .006 | .70 | .130 | 4 800 | No | 545 | W | .20 | 39 |
| 9 | Chicago Avenue | .001 | .032 | .70 | .120 | 18 400 | No | | | | |
| 9 | Hyde Park | Trace | .006 | .75 | .110 | 1 650 | No | | | | |
| 9 | Lake View | .001 | .042 | .70 | .150 | 512 | No | | | | |
| 10 | 14th Street | .001 | .006 | .65 | .210 | 6 400 | No | 443 | Se | .13 | 48 |
| 10 | Chicago Avenue | .001 | .006 | .65 | .140 | 11 480 | No | | | | |
| 10 | Hyde Park | .001 | .002 | .70 | .160 | 1 286 | No | | | | |
| 10 | Lake View | .002 | .006 | .75 | .180 | 4 200 | No | | | | |
| 11 | 14th Street | .064 | .050 | .70 | .210 | 4 800 | No | 420 | S S Sw | Trace | 62 |
| 11 | Chicago Avenue | .044 | .026 | .75 | .150 | 1 440 | No | | | | |
| 11 | Hyde Park | .048 | .042 | .65 | .120 | 40 | No | | | | |
| 11 | Lake View | .040 | .024 | .65 | .120 | 640 | No | | | | |
| 13 | 14th Street | .036 | .034 | .65 | .110 | 40 | No | 796 | S | .15 | 64 |
| 13 | Chicago Avenue | .018 | .024 | .70 | .140 | 5 600 | No | | | | |
| 13 | Hyde Park | .022 | .022 | .70 | .120 | 320 | No | | | | |
| 13 | Lake View | .022 | .024 | .70 | .110 | 1 920 | No | | | | |
| 14 | 14th Street | Trace | .006 | .65 | .100 | 910 | No | 528 | Sw | .07 | 62 |
| 14 | Chicago Avenue | Trace | .008 | .75 | .110 | 13 120 | No | | | | |
| 14 | Hyde Park | .001 | .020 | .65 | .160 | 3 400 | No | | | | |
| 14 | Lake View | .001 | .024 | .70 | .110 | 6 400 | No | | | | |
| 15 | 14th Street | .032 | .030 | .60 | .120 | 430 | No | 729 | S | 0 | 69 |
| 15 | Chicago Avenue | .014 | .022 | .70 | .100 | 3 520 | No | | | | |
| 15 | Hyde Park | Trace | .012 | .60 | .180 | 7 200 | No | | | | |
| 15 | Lake View | .038 | .026 | .65 | .160 | 3 320 | No | | | | |

RESULTS OF DAILY EXAMINATIONS—*Continued.*

| APRIL. | SOURCE OF SAMPLES. PUMPING STATIONS. | Free Am- monia. | Albuminoid Ammonia. | Chlorine. | Oxygen cons. in 10 min. at 100° C. | Bacteria per cc. | Pathogenic Bacteria. | METEOROLOGIC DATA 24-HOUR PERIODS. | | | | |
|--------|---|--------------------|------------------------|-----------|--|---------------------|-------------------------|---------------------------------------|----------------|------------------------------|---------------|--|
| | | | | | | | | Wind move- ment. | Wind direc. | Precip- ita'n, inches. | Mean temp. | |
| 16 | 14th Street | .022 | .022 | .60 | .120 | 5 440 | No | 812 | Sw | 0 | 74 | |
| 16 | Chicago Avenue | .014 | .018 | .70 | .110 | 7 200 | No | | | | | |
| 16 | Hyde Park | .018 | .010 | .70 | .150 | 830 | No | | | | | |
| 16 | Lake View | .018 | .020 | .65 | .150 | 18 000 | No | | | | | |
| 17 | 14th Street | .012 | .006 | .65 | .100 | 250 | No | 422 | Sw | 0 | 65 | |
| 17 | Chicago Avenue | .014 | .012 | .70 | .130 | 8 320 | No | | | | | |
| 17 | Hyde Park | .001 | Trace | .70 | .100 | 1 670 | No | | | | | |
| 17 | Lake View | .012 | .010 | .65 | .140 | 11 200 | No | | | | | |
| 18 | 14th Street | .015 | .005 | .65 | .100 | 4 000 | No | 721 | S | 0 | 74 | |
| 18 | Chicago Avenue | .012 | .010 | .65 | .150 | 16 800 | No | | | | | |
| 18 | Hyde Park | .002 | Trace | .70 | .150 | 16 000 | No | | | | | |
| 18 | Lake View | .012 | .015 | .65 | .100 | 8 800 | No | | | | | |
| 20 | 14th Street | .008 | .008 | .60 | .130 | 13 600 | No | 383 | S | 1.13 | 60 | |
| 20 | Chicago Avenue | .008 | .006 | .70 | .110 | 2 880 | Yes | | | | | |
| 20 | Hyde Park | .002 | .007 | .60 | .100 | 2 300 | No | | | | | |
| 20 | Lake View | .004 | .005 | .60 | .150 | 9 600 | Yes | | | | | |
| 21 | 14th Street | Trace | .002 | .65 | .110 | 9 700 | No | 350 | Nw | .05 | 51 | |
| 21 | Chicago Avenue | .001 | .003 | .65 | .120 | 8 800 | No | | | | | |
| 21 | Hyde Park | Trace | .002 | .60 | .110 | 2 241 | No | | | | | |
| 21 | Lake View | Trace | .003 | .60 | .140 | 15 200 | No | | | | | |
| 22 | 14th Street | Trace | .004 | .65 | .130 | 1 210 | No | 265 | Ne | 0 | 43 | |
| 22 | Chicago Avenue | Trace | .004 | .65 | .130 | 1 080 | No | | | | | |
| 22 | Hyde Park | Trace | .001 | .65 | .120 | 960 | No | | | | | |
| 22 | Lake View | Trace | .002 | .65 | .120 | 830 | No | | | | | |
| 23 | 14th Street | .024 | .008 | .60 | .140 | 420 | No | 411 | Se | .49 | 50 | |
| 23 | Chicago Avenue | .024 | .004 | .70 | .120 | 3 580 | No | | | | | |
| 23 | Hyde Park | .002 | .006 | .60 | .100 | 4 160 | No | | | | | |
| 23 | Lake View | Trace | .004 | .65 | .160 | 9 920 | No | | | | | |
| 24 | 14th Street | Trace | .001 | .60 | .120 | 15 200 | No | 392 | W | .29 | 60 | |
| 24 | Chicago Avenue | .001 | .002 | .65 | .130 | 3 680 | No | | | | | |
| 24 | Hyde Park | .001 | .001 | .65 | .110 | 5 760 | No | | | | | |
| 24 | Lake View | Trace | .004 | .65 | .160 | 2 880 | No | | | | | |
| 25 | 14th Street | Trace | .001 | .60 | .120 | 1 056 | No | 216 | E | 0 | 54 | |
| 25 | Chicago Avenue | .010 | .002 | .70 | .120 | 7 040 | No | | | | | |
| 25 | Hyde Park | .006 | .001 | .70 | .140 | 2 560 | No | | | | | |
| 25 | Lake View | .006 | .002 | .60 | .120 | 6 400 | No | | | | | |
| 27 | 14th Street | .002 | .010 | .65 | .170 | 640 | No | 214 | E | .07 | 56 | |
| 27 | Chicago Avenue | .001 | .006 | .70 | .160 | 760 | No | | | | | |
| 27 | Hyde Park | Trace | .004 | .65 | .110 | 1 290 | No | | | | | |
| 27 | Lake View | .001 | .006 | .65 | .160 | 510 | No | | | | | |
| 28 | 14th Street | .001 | .002 | .70 | .140 | 4 000 | Yes | 443 | Se | 0 | 65 | |
| 28 | Chicago Avenue | .001 | .004 | .70 | .150 | 2 560 | Yes | | | | | |
| 28 | Hyde Park | Trace | .002 | .65 | .130 | 4 960 | No | | | | | |
| 28 | Lake View | Trace | .006 | .70 | .180 | 640 | No | | | | | |
| 29 | 14th Street | .001 | .008 | .60 | .160 | 13 120 | No | 545 | Se S | Trace | 66 | |
| 29 | Chicago Avenue | .002 | .008 | .65 | .190 | 4 000 | No | | | | | |
| 29 | Hyde Park | Trace | .006 | .65 | .150 | 11 200 | No | | | | | |
| 29 | Lake View | .002 | .006 | .65 | .150 | 7 200 | No | | | | | |
| 30 | 14th Street | Trace | .004 | .60 | .140 | 2 460 | Yes | 418 | S | Trace | 63 | |
| 30 | Chicago Avenue | Trace | .003 | .60 | .170 | 1 920 | No | | | | | |
| 30 | Hyde Park | Trace | .001 | .60 | .130 | 3 200 | No | | | | | |
| 30 | Lake View | .001 | .006 | .65 | .160 | 1 600 | No | | | | | |

RESULTS OF DAILY EXAMINATIONS—*Continued.*

| MAY. | SOURCE OF SAMPLES. PUMPING STATIONS. | Free Am- monia. | Albuminoid Ammonia. | Chlorine. | Oxygen cons. in 10 min. at 100° C. | Bacteria per cc. | Pathogenic Bacteria. | METEOROLOGIC DATA 24-HOUR PERIODS. | | | |
|------|---|--------------------|------------------------|-----------|--|---------------------|-------------------------|---------------------------------------|----------------|------------------------------|---------------|
| | | | | | | | | Wind move- ment. | Wind direc. | Precip- ita'n. inches. | Mean temp. |
| 1 | 14th Street | .001 | .004 | .60 | .120 | 11 200 | No | 528 | Se | Trace | 66 |
| 1 | Chicago Avenue | .001 | .004 | .65 | .150 | 8 800 | Yes | | | | |
| 1 | Hyde Park | Trace | .002 | .60 | .110 | 7 200 | No | | | | |
| 1 | Lake View | .001 | .004 | .65 | .150 | 16 400 | Yes | | | | |
| 2 | 14th Street | Trace | .003 | .60 | .130 | 14 400 | No | 438 | W | .14 | 61 |
| 2 | Chicago Avenue | Trace | .002 | .65 | .130 | 1 920 | No | | | | |
| 2 | Hyde Park | Trace | .002 | .60 | .130 | 10 040 | No | | | | |
| 2 | Lake View | .001 | .004 | .60 | .160 | 5 440 | Yes | | | | |
| 4 | 14th Street | .002 | .004 | .65 | .160 | 16 000 | No | 335 | E | 0 | 62 |
| 4 | Chicago Avenue | Trace | .001 | .65 | .110 | 1 324 | No | | | | |
| 4 | Hyde Park | Trace | .001 | .65 | .110 | 960 | No | | | | |
| 4 | Lake View | Trace | .008 | .65 | .130 | 5 120 | No | | | | |
| 5 | 14th Street | Trace | .002 | .60 | .110 | 5 280 | No | 334 | E | 0 | 62 |
| 5 | Chicago Avenue | Trace | .001 | .65 | .110 | 1 920 | No | | | | |
| 5 | Hyde Park | Trace | .002 | .60 | .100 | 2 940 | No | | | | |
| 5 | Lake View | Trace | .004 | .60 | .130 | 100 | No | | | | |
| 6 | 14th Street | .001 | .001 | .60 | .120 | 2 000 | No | 465 | Se | 0 | 68 |
| 6 | Chicago Avenue | .001 | .006 | .60 | .260 | 1 800 | No | | | | |
| 6 | Hyde Park | Trace | .002 | .60 | .110 | 5 600 | No | | | | |
| 6 | Lake View | Trace | .004 | .60 | .110 | 4 000 | No | | | | |
| 7 | 14th Street | Trace | .002 | .60 | .120 | 640 | No | 432 | S | 0 | 74 |
| 7 | Chicago Avenue | Trace | .002 | .60 | .130 | 4 800 | No | | | | |
| 7 | Hyde Park | Trace | .001 | .60 | .120 | 380 | No | | | | |
| 7 | Lake View | Trace | .002 | .60 | .120 | 8 000 | No | | | | |
| 8 | 14th Street | .001 | .038 | .60 | .120 | 1 920 | No | 401 | S | 0 | 76 |
| 8 | Chicago Avenue | Trace | .056 | .60 | .160 | 2 240 | No | | | | |
| 8 | Hyde Park | Trace | .026 | .60 | .120 | 2 880 | No | | | | |
| 8 | Lake View | .001 | .062 | .60 | .210 | 5 120 | No | | | | |
| 9 | 14th Street | .001 | .004 | .60 | .120 | 14 400 | No | 423 | Sw | 0 | 79 |
| 9 | Chicago Avenue | .001 | .006 | .60 | .130 | 7 200 | No | | | | |
| 9 | Hyde Park | .001 | .004 | .60 | .110 | 12 000 | No | | | | |
| 9 | Lake View | .001 | .008 | .65 | .170 | 8 000 | No | | | | |
| 11 | 14th Street | .004 | .004 | .60 | .160 | 1 580 | No | 398 | S | 0 | 75 |
| 11 | Chicago Avenue | Trace | .006 | .60 | .170 | 6 500 | No | | | | |
| 11 | Hyde Park | .001 | .001 | .60 | .130 | 4 800 | No | | | | |
| 11 | Lake View | Trace | .001 | .60 | .130 | 4 500 | No | | | | |
| 12 | 14th Street | .014 | .012 | .60 | .120 | 4 800 | No | 374 | S | 0 | 74 |
| 12 | Chicago Avenue | .010 | .030 | .60 | .150 | 5 600 | No | | | | |
| 12 | Hyde Park | .012 | .012 | .60 | .100 | 4 000 | No | | | | |
| 12 | Lake View | .010 | .018 | .60 | .130 | 7 200 | No | | | | |
| 13 | 14th Street | .001 | .001 | .60 | .120 | 3 840 | No | 554 | Se | 0 | 69 |
| 13 | Chicago Avenue | Trace | .004 | .60 | .150 | 3 750 | No | | | | |
| 13 | Hyde Park | Trace | .002 | .60 | .170 | 4 800 | No | | | | |
| 13 | Lake View | .010 | .008 | .60 | .130 | 4 000 | No | | | | |
| 14 | 14th Street | .002 | .004 | .60 | .140 | 11 200 | No | 706 | S | .03 | 64 |
| 14 | Chicago Avenue | .001 | .008 | .60 | .170 | 6 400 | No | | | | |
| 14 | Hyde Park | .001 | .002 | .60 | .120 | 6 500 | No | | | | |
| 14 | Lake View | Trace | .002 | .60 | .150 | 5 000 | No | | | | |
| 15 | 14th Street | Trace | .006 | .60 | .150 | 11 200 | No | 482 | W | 0 | 64 |
| 15 | Chicago Avenue | .001 | .002 | .60 | .150 | 4 200 | No | | | | |
| 15 | Hyde Park | Trace | .004 | .60 | .130 | 1 200 | No | | | | |
| 15 | Lake View | Trace | .002 | .60 | .160 | 4 000 | No | | | | |

RESULTS OF DAILY EXAMINATIONS—*Continued.*

| MAY. | SOURCE OF PUMPING STATIONS. | Free Am- monia. | Albuminoid Ammonia. | Chlorine. | Oxygen cons. in 10 min. at 100° C. | Bacteria per cc. | Pathogenic Bacteria. | METEOROLOGIC DATA 24-HOUR PERIODS. | | | |
|------|-----------------------------------|--------------------|------------------------|-----------|--|---------------------|-------------------------|---------------------------------------|----------------|------------------------------|---------------|
| | | | | | | | | Wind move- ment. | Wind direc. | Precip- ita'n, inches. | Mean temp. |
| 16 | 14th Street | .001 | .003 | .60 | .110 | 9 600 | No | 495 | Se | .01 | 60 |
| 16 | Chicago Avenue | .001 | .002 | .60 | .150 | 1 600 | No | | | | |
| 16 | Hyde Park | .001 | .001 | .60 | .120 | 10 400 | No | | | | |
| 16 | Lake View | .001 | .006 | .60 | .180 | 1 600 | No | | | | |
| 18 | 14th Street .. | Trace | .008 | .60 | .130 | 480 | No | 891 | W | .26 | 66 |
| 18 | Chicago Avenue | .001 | .006 | .60 | .150 | 5 000 | No | | | | |
| 18 | Hyde Park | Trace | .006 | .60 | .110 | 4 000 | Yes | | | | |
| 18 | Lake View.... | .004 | .008 | .60 | .190 | 6 560 | Yes | | | | |
| 19 | 14th Street | Trace | .008 | .60 | .140 | 13 600 | No | 475 | Ne | .55 | 52 |
| 19 | Chicago Avenue | Trace | .004 | .60 | .140 | 6 000 | No | | | | |
| 19 | Hyde Park | Trace | .006 | .60 | .110 | 5 600 | Yes | | | | |
| 19 | Lake View | Trace | .002 | .60 | .180 | 5 600 | No | | | | |
| 20 | 14th Street | Trace | .006 | .65 | .120 | 3 200 | No | 362 | E | 0 | 55 |
| 20 | Chicago Avenue | Trace | .008 | .60 | .210 | 640 | No | | | | |
| 20 | Hyde Park | Trace | .002 | .60 | .120 | 4 960 | No | | | | |
| 20 | Lake View | .001 | .008 | .60 | .200 | 920 | No | | | | |
| 21 | 14th Street | .001 | .003 | .65 | .120 | 3 200 | Yes | 416 | W | .33 | 68 |
| 21 | Chicago Avenue | .001 | .006 | .70 | .180 | 6 400 | No | | | | |
| 21 | Hyde Park | Trace | .003 | .60 | .120 | 5 600 | Yes | | | | |
| 21 | Lake View | .001 | .006 | .65 | .180 | 5 400 | No | | | | |
| 22 | 14th Street | Trace | .008 | .60 | .130 | 12 000 | No | 365 | Ne | 0 | 58 |
| 22 | Chicago Avenue | Trace | .004 | .65 | .120 | 16 000 | No | | | | |
| 22 | Hyde Park | Trace | .004 | .55 | .140 | 2 880 | No | | | | |
| 22 | Lake View | .001 | .020 | .55 | .230 | 12 000 | No | | | | |
| 23 | 14th Street | Trace | .002 | .60 | .140 | 15 000 | No | 281 | E | 0 | 54 |
| 23 | Chicago Avenue | .001 | .010 | .60 | .160 | 3 200 | No | | | | |
| 23 | Hyde Park | Trace | .002 | .60 | .150 | 1 600 | No | | | | |
| 23 | Lake View | .001 | .110 | .60 | .210 | 320 | No | | | | |
| 25 | 14th Street .. | .008 | .004 | .60 | .190 | 8 800 | No | 649 | Se | 1.47 | 77 |
| 25 | Chicago Avenue | Trace | .001 | .60 | .160 | 2 688 | No | | | | |
| 25 | Hyde Park | Trace | .004 | .60 | .130 | 11 200 | No | | | | |
| 25 | Lake View | Trace | .006 | .60 | .240 | 4 000 | No | | | | |
| 26 | 14th Street | Trace | .004 | .60 | .140 | 15 000 | No | 520 | W | 0 | 68 |
| 26 | Chicago Avenue | .001 | .004 | .60 | .160 | 6 400 | Yes | | | | |
| 26 | Hyde Park | Trace | .006 | .60 | .140 | 7 200 | Yes | | | | |
| 26 | Lake View | .001 | .008 | .60 | .190 | 5 120 | No | | | | |
| 27 | 14th Street | .001 | .004 | .60 | .140 | 1 920 | No | 380 | S | .35 | 64 |
| 27 | Chicago Avenue | Trace | .003 | .60 | .140 | 4 800 | No | | | | |
| 27 | Hyde Park | Trace | .003 | .60 | .140 | 1 600 | No | | | | |
| 27 | Lake View | .001 | .008 | .60 | .180 | 4 000 | No | | | | |
| 28 | 14th Street | .002 | .006 | .55 | .160 | 5 000 | No | 507 | Nw | Trace | 60 |
| 28 | Chicago Avenue | Trace | .004 | .55 | .150 | 9 600 | No | | | | |
| 28 | Hyde Park | Trace | .004 | .55 | .140 | 8 000 | No | | | | |
| 28 | Lake View | .001 | .010 | .55 | .240 | 5 600 | No | | | | |
| 29 | 14th Street | .004 | .006 | .60 | .150 | 4 480 | No | 402 | Nw | 0 | 62 |
| 29 | Chicago Avenue | Trace | .008 | .60 | .170 | 7 200 | No | | | | |
| 29 | Hyde Park | .014 | .004 | .55 | .140 | 6 400 | No | | | | |
| 29 | Lake View | Trace | .010 | .55 | .210 | 9 600 | No | | | | |

RESULTS OF DAILY EXAMINATIONS—*Continued.*

| JUNE. | SOURCE OF SAMPLES. PUMPING STATIONS. | Free Am- monia. | Albuminoid Ammonia. | Chlorine. | Oxygen cons. in 10 min. at 100° C. | Bacteria per cc. | Pathogenic Bacteria. | METEOROLOGIC DATA 24-HOUR PERIODS. | | | |
|-------|---|--------------------|------------------------|-----------|--|---------------------|-------------------------|---------------------------------------|----------------|------------------------------|---------------|
| | | | | | | | | Wind move- ment. | Wind direc. | Precip- ita'n, inches. | Mean temp. |
| 1 | 14th Street | Trace | .008 | .60 | .140 | 5 600 | No | 481 | N | 0 | 54 |
| 1 | Chicago Avenue | Trace | .006 | .60 | .140 | 5 760 | No | | | | |
| 1 | Hyde Park | Trace | .008 | .60 | .140 | 2 560 | No | | | | |
| 1 | Lake View | .001 | .020 | .60 | .140 | 320 | No | | | | |
| 2 | 14th Street | Trace | .003 | .60 | .150 | 460 | No | 303 | Ne | 0 | 56 |
| 2 | Chicago Avenue | .001 | .003 | .60 | .140 | 6 400 | No | | | | |
| 2 | Hyde Park | Trace | .004 | .60 | .130 | 2 340 | No | | | | |
| 2 | Lake View | .001 | .006 | .60 | .210 | 9 400 | No | | | | |
| 3 | 14th Street | Trace | .004 | .60 | .140 | 6 400 | No | 316 | Ne | .33 | 56 |
| 3 | Chicago Avenue | .001 | .006 | .60 | .170 | 4 200 | No | | | | |
| 3 | Hyde Park | Trace | .002 | .60 | .150 | 7 400 | No | | | | |
| 3 | Lake View | .001 | .004 | .60 | .240 | 9 600 | No | | | | |
| 4 | 14th Street | .001 | .003 | .60 | .150 | 6 500 | No | 218 | Se | 0 | 66 |
| 4 | Chicago Avenue | .001 | .003 | .60 | .180 | 6 560 | No | | | | |
| 4 | Hyde Park | .001 | .004 | .60 | .150 | 3 200 | No | | | | |
| 4 | Lake View | .001 | .005 | .60 | .130 | 3 200 | No | | | | |
| 5 | 14th Street | Trace | .004 | .60 | .140 | 5 670 | No | 373 | Sw | Trace | 74 |
| 5 | Chicago Avenue | .001 | .004 | .60 | .130 | 5 000 | No | | | | |
| 5 | Hyde Park | Trace | .004 | .60 | .120 | 4 200 | No | | | | |
| 5 | Lake View | .001 | .008 | .60 | .160 | 16 000 | No | | | | |
| 6 | 14th Street | Trace | .006 | .60 | .140 | 5 900 | No | 370 | Se | 0 | 78 |
| 6 | Chicago Avenue | Trace | .006 | .60 | .150 | 6 400 | No | | | | |
| 6 | Hyde Park | .001 | .014 | .60 | .130 | 2 400 | No | | | | |
| 6 | Lake View | .001 | .012 | .60 | .240 | 3 000 | No | | | | |
| 8 | 14th Street | Trace | .002 | .60 | .140 | 4 480 | No | 292 | W | .40 | 70 |
| 8 | Chicago Avenue | Trace | .002 | .60 | .150 | 5 400 | Yes | | | | |
| 8 | Hyde Park | Trace | .002 | .60 | .130 | 6 800 | No | | | | |
| 8 | Lake View | Trace | .003 | .60 | .150 | 14 560 | No | | | | |
| 9 | 14th Street | .001 | .001 | .60 | .150 | 12 000 | No | 635 | N | Trace | 57 |
| 9 | Chicago Avenue | .001 | .001 | .60 | .140 | 6 000 | Yes | | | | |
| 9 | Hyde Park | .001 | .002 | .60 | .130 | 6 800 | No | | | | |
| 9 | Lake View | .001 | .010 | .60 | .160 | 11 200 | No | | | | |
| 10 | 14th Street | Trace | .005 | .65 | .140 | 320 | No | 463 | N | .02 | 57 |
| 10 | Chicago Avenue | Trace | .006 | .65 | .140 | 6 000 | No | | | | |
| 10 | Hyde Park | Trace | .010 | .65 | .150 | 5 200 | No | | | | |
| 10 | Lake View | .001 | .018 | .65 | .380 | 11 800 | No | | | | |
| 11 | 14th Street | Trace | .004 | .60 | .140 | 1 400 | No | 209 | Ne | 0 | 62 |
| 11 | Chicago Avenue | .001 | .004 | .65 | .130 | 5 400 | No | | | | |
| 11 | Hyde Park | .001 | .006 | .65 | .140 | 1 920 | No | | | | |
| 11 | Lake View | .001 | .012 | .65 | .240 | 120 | No | | | | |
| 12 | 14th Street | .001 | .006 | .60 | .150 | 150 | No | 298 | N | .38 | 61 |
| 12 | Chicago Avenue | .001 | .005 | .60 | .150 | 16 000 | No | | | | |
| 12 | Hyde Park | .001 | .006 | .60 | .150 | 1 600 | No | | | | |
| 12 | Lake View | .001 | .008 | .60 | .190 | 5 600 | No | | | | |
| 13 | 14th Street | .001 | .002 | .60 | .150 | 120 | No | 374 | N | .02 | 62 |
| 13 | Chicago Avenue | .001 | .002 | .65 | .140 | 1 600 | No | | | | |
| 13 | Hyde Park | .001 | .008 | .60 | .130 | 160000 | No | | | | |
| 13 | Lake View | .001 | .004 | .60 | .190 | 10 400 | No | | | | |
| 15 | 14th Street | .001 | .002 | .60 | .150 | 12 000 | No | 226 | WSw | .20 | 65 |
| 15 | Chicago Avenue | Trace | .002 | .60 | .160 | 17 200 | No | | | | |
| 15 | Hyde Park | Trace | .003 | .60 | .140 | 19 200 | No | | | | |
| 15 | Lake View | .001 | .005 | .65 | .160 | 21 200 | No | | | | |

RESULTS OF DAILY EXAMINATIONS—Continued.

| JUNE. | SOURCE OF SAMPLES. PUMPING STATIONS. | Free Am- monia. | Albuminoid Ammonia. | Chlorine. | Oxygen cons. in 10 min. at 100° C. | Bacteria per cc. | Pathogenic Bacteria. | METEOROLOGIC DATA 24-HOUR PERIODS. | | | |
|-------|---|--------------------|------------------------|-----------|--|---------------------|-------------------------|---------------------------------------|---------------------|--------------------------------|---------------|
| | | | | | | | | Wind move- ment. | Wind direc. | Precip- itation, inches. | Mean temp. |
| 16 | 14th Street | Trace | .010 | .60 | .150 | 21 000 | No | 225 | Ne | 0 | 62 |
| 16 | Chicago Avenue | Trace | .010 | .60 | .140 | 15 600 | No | | | | |
| 16 | Hyde Park | Trace | .010 | .60 | .140 | 3 600 | No | | | | |
| 16 | Lake View | Trace | .010 | .65 | .190 | 15 000 | No | | | | |
| 17 | 14th Street | .001 | .006 | .60 | .140 | 1 200 | No | 282 | N | 0 | 66 |
| 17 | Chicago Avenue | .001 | .006 | .60 | .140 | 8 000 | No | | | | |
| 17 | Hyde Park | .001 | .006 | .60 | .130 | 10 400 | No | | | | |
| 17 | Lake View | .001 | .006 | .60 | .140 | 4 300 | No | | | | |
| 18 | 14th Street | .001 | .010 | .65 | .170 | 1 610 | No | 272 | Se | 0 | 70 |
| 18 | Chicago Avenue | .001 | .004 | .65 | .140 | 2 940 | No | | | | |
| 18 | Hyde Park | .001 | .005 | .65 | .130 | 3 000 | No | | | | |
| 18 | Lake View | .001 | .004 | .70 | .150 | 560 | No | | | | |
| 19 | 14th Street | Trace | .008 | .70 | .150 | 420 | No | 469 | S | .44 | 76 |
| 19 | Chicago Avenue | .001 | .006 | .70 | .160 | 1 250 | No | | | | |
| 19 | Hyde Park | Trace | .006 | .65 | .130 | 11 400 | No | | | | |
| 19 | Lake View | .001 | .008 | .70 | .160 | 230 | No | | | | |
| 20 | 14th Street | .001 | .007 | .65 | .140 | 2 160 | No | 331 | SSw | .39 | 74 |
| 20 | Chicago Avenue | .001 | .006 | .65 | .150 | 740 | No | | | | |
| 20 | Hyde Park | .001 | .008 | .65 | .130 | 2 600 | No | | | | |
| 20 | Lake View | .001 | .008 | .65 | .130 | 7 400 | No | | | | |
| 22 | 14th Street | .001 | .004 | .65 | .130 | 17 600 | No | 418 | Ne | 0 | 70 |
| 22 | Chicago Avenue | .001 | .004 | .70 | .140 | 6 760 | No | | | | |
| 22 | Hyde Park | Trace | .002 | .70 | .120 | 12 400 | No | | | | |
| 22 | Lake View | .001 | .004 | .65 | .170 | 140 | No | | | | |
| 23 | 14th Street | Trace | .008 | .65 | .140 | 200 | No | 491 | E | .04 | 66 |
| 23 | Chicago Avenue | Trace | .006 | .70 | .130 | 2 880 | No | | | | |
| 23 | Hyde Park | Trace | .006 | .65 | .140 | 10 800 | No | | | | |
| 23 | Lake View | Trace | .008 | .65 | .170 | 5 000 | No | | | | |
| 24 | 14th Street | Trace | .004 | .65 | .140 | 9 200 | No | 211 | Se | Trace | 66 |
| 24 | Chicago Avenue | .001 | .004 | .65 | .140 | 4 800 | No | | | | |
| 24 | Hyde Park | Trace | .004 | .65 | .140 | 4 400 | No | | | | |
| 24 | Lake View | Trace | .002 | .65 | .180 | 11 600 | No | | | | |
| 25 | 14th Street | .001 | .008 | .65 | .150 | 6 400 | No | 455 | S | .02 | 78 |
| 25 | Chicago Avenue | Trace | .020 | .70 | .150 | 3 040 | No | | | | |
| 25 | Hyde Park | .001 | .008 | .65 | .120 | 4 280 | No | | | | |
| 25 | Lake View | Trace | .016 | .65 | .180 | 13 700 | No | | | | |
| 26 | 14th Street | .006 | .012 | .65 | .180 | 740 | No | 245 | Nw Ne Se S | 0 | 68 |
| 26 | Chicago Avenue | Trace | .008 | .65 | .150 | 150 000 | No | | | | |
| 26 | Hyde Park | Trace | .006 | .65 | .150 | 384 | No | | | | |
| 26 | Lake View | Trace | .006 | .65 | .200 | 150 000 | No | | | | |
| 27 | 14th Street | Trace | .008 | .65 | .140 | 12 600 | No | 333 | SSw | 0 | 72 |
| 27 | Chicago Avenue | .001 | .008 | .65 | .150 | 320 | No | | | | |
| 27 | Hyde Park | .001 | .008 | .65 | .160 | 2 800 | No | | | | |
| 27 | Lake View | .001 | .010 | .65 | .160 | 640 | No | | | | |
| 29 | 14th Street | Trace | .003 | .65 | .150 | 12 400 | No | 360 | Ne | 0 | 64 |
| 29 | Chicago Avenue | Trace | .004 | .70 | .140 | 3 600 | Yes | | | | |
| 29 | Hyde Park | Trace | .006 | .65 | .170 | 1 800 | No | | | | |
| 29 | Lake View | Trace | .010 | .65 | .190 | 640 | No | | | | |
| 30 | 14th Street | .001 | .008 | .65 | .180 | 16 000 | No | 316 | S | 0 | 74 |
| 30 | Chicago Avenue | .001 | .006 | .65 | .170 | 180 | No | | | | |
| 30 | Hyde Park | .001 | .008 | .65 | .190 | 2 240 | No | | | | |
| 30 | Lake View | .001 | .010 | .65 | .230 | 18 800 | No | | | | |

RESULTS OF DAILY EXAMINATIONS—*Continued.*

| JULY. | SOURCE OF SAMPLES. PUMPING STATIONS. | Free Am- monia. | Albuminoid Ammonia. | Chlorine. | Oxygen cons. in 10 min. at 100° C. | Bacteria per cc. | Pathogenic Bacteria. | METEOROLOGIC DATA 24-HOUR PERIODS. | | | |
|-------|---|--------------------|------------------------|-----------|--|---------------------|-------------------------|---------------------------------------|----------------|------------------------------|---------------|
| | | | | | | | | Wind move- ment. | Wind direc. | Precip- ita'n. inches. | Mean temp. |
| 1 | 14th Street | Trace | .008 | .65 | .180 | 6 400 | No | Se | Se | 0 | 78 |
| 1 | Chicago Avenue | .001 | .006 | .65 | .150 | 12 800 | No | S | S | | |
| 1 | Hyde Park | .001 | .008 | .65 | .150 | 12 000 | No | Sw | Sw | | |
| 1 | Lake View | Trace | .010 | .65 | .190 | 14 800 | No | W | W | | |
| 2 | 14th Street | Trace | .006 | .65 | .170 | 17 200 | No | 324 | Sw | 0 | 80 |
| 2 | Chicago Avenue | Trace | .010 | .65 | .140 | 4 800 | No | | | | |
| 2 | Hyde Park | Trace | .008 | .65 | .150 | 6 560 | No | | | | |
| 2 | Lake View | Trace | .006 | .65 | .220 | 15 000 | No | | | | |
| 3 | 14th Street | .001 | .008 | .65 | .170 | 8 420 | Yes | 315 | E | .06 | 77 |
| 3 | Chicago Avenue | Trace | .004 | .65 | .130 | 6 400 | Yes | | | | |
| 3 | Hyde Park | Trace | .006 | .65 | .170 | 10 800 | No | | | | |
| 3 | Lake View | .001 | .008 | .65 | .180 | 8 800 | No | | | | |
| 6 | 14th Street | Trace | .002 | .60 | .180 | 8 200 | No | 473 | Ne | 0 | 66 |
| 6 | Chicago Avenue | Trace | .006 | .65 | .190 | 28 000 | No | | | | |
| 6 | Hyde Park | Trace | .002 | .65 | .170 | 5 600 | Yes | | | | |
| 6 | Lake View | Trace | .006 | .65 | .220 | 11 400 | No | | | | |
| 7 | 14th Street | Trace | .004 | .65 | .190 | 4 000 | No | 406 | Ne | 0 | 64 |
| 7 | Chicago Avenue | Trace | .004 | .65 | .180 | 2 000 | No | | | | |
| 7 | Hyde Park | Trace | .001 | .65 | .160 | 9 200 | No | | | | |
| 7 | Lake View | .001 | .006 | .65 | .200 | 25 200 | No | | | | |
| 8 | 14th Street | Trace | .002 | .65 | .130 | 12 200 | No | 367 | Ne | 0 | 68 |
| 8 | Chicago Avenue | Trace | .006 | .65 | .140 | 11 000 | Yes | | | | |
| 8 | Hyde Park | Trace | .004 | .65 | .160 | 15 200 | No | | | | |
| 8 | Lake View | Trace | .004 | .65 | .160 | 8 800 | No | | | | |
| 9 | 14th Street | .001 | .004 | .65 | .150 | 2 000 | No | 330 | N | 0 | 68 |
| 9 | Chicago Avenue | Trace | .004 | .65 | .150 | 22 800 | No | | | | |
| 9 | Hyde Park | Trace | .004 | .65 | .160 | 3 600 | No | | | | |
| 9 | Lake View | .001 | .006 | .65 | .220 | 3 800 | No | | | | |
| 10 | 14th Street | .001 | .004 | .65 | .170 | 3 900 | No | 287 | W | 0 | 74 |
| 10 | Chicago Avenue | Trace | .001 | .65 | .170 | 800 | No | | | | |
| 10 | Hyde Park | Trace | .001 | .65 | .160 | 3 500 | No | | | | |
| 10 | Lake View | Trace | .004 | .65 | .250 | 10 000 | No | | | | |
| 11 | 14th Street | .001 | .010 | .65 | .160 | 8 800 | No | 341 | W | 0 | 78 |
| 11 | Chicago Avenue | Trace | .010 | .65 | .180 | 8 640 | No | | | | |
| 11 | Hyde Park | Trace | .002 | .65 | .130 | 3 200 | No | | | | |
| 11 | Lake View | Trace | .005 | .60 | .160 | 220 | No | | | | |
| 13 | 14th Street | Trace | .004 | .65 | .150 | 13 600 | No | 376 | W | 0 | 81 |
| 13 | Chicago Avenue | Trace | .004 | .65 | .160 | 20 160 | No | | | | |
| 13 | Hyde Park | .001 | .002 | .65 | .160 | 10 000 | No | | | | |
| 13 | Lake View | Trace | .006 | .65 | .230 | 27 200 | No | | | | |
| 14 | 14th Street | Trace | .004 | .65 | .160 | 20 000 | No | 406 | W | .10 | 80 |
| 14 | Chicago Avenue | Trace | .006 | .65 | .160 | 11 600 | No | | | | |
| 14 | Hyde Park | Trace | .004 | .65 | .130 | 8 400 | No | | | | |
| 14 | Lake View | Trace | .006 | .65 | .180 | 13 200 | No | | | | |
| 15 | 14th Street | Trace | .001 | .65 | .160 | 244 | Yes | 577 | Ne | 0 | 70 |
| 15 | Chicago Avenue | Trace | .002 | .65 | .170 | 215 | No | | | | |
| 15 | Hyde Park | Trace | .002 | .60 | .150 | 24 800 | No | | | | |
| 15 | Lake View | .001 | .005 | .60 | .290 | 22 400 | No | | | | |
| 16 | 14th Street | .001 | .004 | .60 | .170 | 400 | No | 562 | N Ne | 0 | 60 |
| 16 | Chicago Avenue | .001 | .006 | .60 | .200 | 115 | No | | | | |
| 16 | Hyde Park | .001 | .003 | .60 | .130 | 600 | No | | | | |
| 16 | Lake View | Trace | .008 | .60 | .250 | 7 000 | Yes | | | | |

RESULTS OF DAILY EXAMINATIONS—Continued.

| JULY. | SOURCE OF SAMPLES. PUMPING STATIONS. | Free Am- monia. | Aluminoid Ammonia. | Chlorine. | Oxygen cons. in 10 min. at 100° C. | Bacteria per cc. | Pathogenic Bacteria. | METEOROLOGIC DATA 24-HOUR PERIODS. | | | |
|-------|---|--------------------|-----------------------|-----------|--|---------------------|-------------------------|---------------------------------------|----------------|------------------------------|---------------|
| | | | | | | | | Wind move- ment. | Wind direc. | Precip- ita n, inches. | Mean temp. |
| 17 | 14th Street | Trace | .006 | .60 | .130 | 4 700 | No | 337 | Se | 0 | 64 |
| 17 | Chicago Avenue | Trace | .008 | .65 | .160 | 60 000 | No | | | | |
| 17 | Hyde Park | .001 | .006 | .60 | .130 | 4 600 | No | | | | |
| 17 | Lake View | .001 | .008 | .60 | .180 | 14 800 | No | | | | |
| 18 | 14th Street | .001 | .002 | .60 | .140 | 4 500 | No | 345 | S | .07 | 66 |
| 18 | Chicago Avenue | .001 | .006 | .60 | .140 | 28 000 | No | | | | |
| 18 | Hyde Park | .001 | .004 | .60 | .140 | 72 000 | No | | | | |
| 18 | Lake View | .001 | .002 | .60 | .230 | 18 500 | No | | | | |
| 20 | 14th Street | Trace | .006 | .65 | .130 | 52 000 | No | 201 | Ne | Trace | 76 |
| 20 | Chicago Avenue | .001 | .006 | .65 | .150 | 6 640 | No | | | | |
| 20 | Hyde Park | .001 | .002 | .65 | .130 | 60 000 | No | | | | |
| 20 | Lake View | Trace | .006 | .60 | .190 | 1 200 | No | | | | |
| 21 | 14th Street | Trace | .008 | .65 | .120 | 18 500 | No | 172 | N Ne | 0 | 74 |
| 21 | Chicago Avenue | Trace | .010 | .65 | .160 | 25 000 | Yes | | | | |
| 21 | Hyde Park | Trace | .008 | .65 | .160 | 4 500 | No | | | | |
| 21 | Lake View | Trace | .024 | .65 | .310 | 32 000 | No | | | | |
| 22 | 14th Street | Trace | .001 | .60 | .140 | 13 400 | No | 282 | Nw | 0 | 77 |
| 22 | Chicago Avenue | .001 | .004 | .65 | .180 | 27 400 | No | | | | |
| 22 | Hyde Park | Trace | .001 | .60 | .150 | 14 400 | No | | | | |
| 22 | Lake View | Trace | .006 | .65 | .240 | 50 000 | No | | | | |
| 23 | 14th Street | .001 | .006 | .65 | .170 | 20 800 | No | 488 | E | .43 | 70 |
| 23 | Chicago Avenue | Trace | .004 | .60 | .150 | 12 000 | No | | | | |
| 23 | Hyde Park | Trace | .004 | .70 | .140 | 320 | No | | | | |
| 23 | Lake View | Trace | .008 | .65 | .180 | 11 000 | Yes | | | | |
| 24 | 14th Street | .001 | .008 | .65 | .190 | 20 000 | No | 439 | Ne | .44 | 62 |
| 24 | Chicago Avenue | .001 | .008 | .65 | .180 | 50 000 | No | | | | |
| 24 | Hyde Park | Trace | .004 | .65 | .150 | 4 000 | Yes | | | | |
| 24 | Lake View | .001 | .006 | .60 | .260 | 1 920 | Yes | | | | |
| 25 | 14th Street | Trace | .004 | .65 | .140 | 550 | No | 255 | Sw | 0 | 70 |
| 25 | Chicago Avenue | Trace | .008 | .65 | .150 | 640 | No | | | | |
| 25 | Hyde Park | .001 | .006 | .65 | .140 | 6 000 | No | | | | |
| 25 | Lake View | .001 | .010 | .65 | .190 | 1 280 | No | | | | |
| 27 | 14th Street | Trace | .008 | .65 | .180 | 6 600 | No | 363 | W | .65 | 76 |
| 27 | Chicago Avenue | Trace | .008 | .65 | .180 | 16 400 | No | | | | |
| 27 | Hyde Park | Trace | .002 | .60 | .170 | 2 800 | No | | | | |
| 27 | Lake View | Trace | .010 | .60 | .210 | 22 400 | No | | | | |
| 28 | 14th Street | Trace | .008 | .60 | .150 | 250 | No | 245 | Ne | 0 | 76 |
| 28 | Chicago Avenue | .001 | .010 | .65 | .170 | 840 | No | | | | |
| 28 | Hyde Park | .001 | .004 | .65 | .150 | 4 280 | No | | | | |
| 28 | Lake View | .001 | .010 | .65 | .190 | 3 260 | No | | | | |
| 29 | 14th Street | .001 | .008 | .65 | .160 | 1 600 | No | 386 | W | Trace | 81 |
| 29 | Chicago Avenue | .001 | .010 | .65 | .160 | 800 | No | | | | |
| 29 | Hyde Park | .002 | .012 | .65 | .160 | 10 000 | No | | | | |
| 29 | Lake View | .001 | .013 | .65 | .220 | 640 | No | | | | |
| 30 | 14th Street | Trace | .008 | .60 | .140 | 200 | No | 383 | N | 0 | 76 |
| 30 | Chicago Avenue | .001 | .006 | .65 | .150 | 1 600 | No | | | | |
| 30 | Hyde Park | Trace | .004 | .60 | .130 | 9 000 | No | | | | |
| 30 | Lake View | .001 | .016 | .60 | .210 | 320 | No | | | | |
| 31 | 14th Street | Trace | .006 | .60 | .150 | 560 | No | 363 | E | 0 | 71 |
| 31 | Chicago Avenue | .001 | .006 | .60 | .140 | 830 | Yes | | | | |
| 31 | Hyde Park | Trace | .008 | .60 | .150 | 2 400 | No | | | | |
| 31 | Lake View | Trace | .010 | .60 | .190 | 5 000 | No | | | | |

RESULTS OF DAILY EXAMINATIONS—*Continued.*

| AUGUST. | SOURCE OF PUMPING STATIONS. | Free Am- monia. | Albuminoid Ammonia. | Chlorine. | Oxygen cons. in 10 min. at 100° C. | Bacteria per cc. | Pathogenic Bacteria. | METEOROLOGIC DATA 24-HOUR PERIODS. | | | |
|---------|-----------------------------------|--------------------|------------------------|-----------|--|---------------------|-------------------------|---------------------------------------|----------------|------------------------------|---------------|
| | | | | | | | | Wind move- ment. | Wind direc. | Precip- ita'n, inches. | Mean temp. |
| 1 | 14th Street..... | .001 | .008 | .60 | .140 | 320 | No | 363 | W | .16 | 74 |
| 1 | Chicago Avenue..... | .001 | .006 | .60 | .140 | 240 | No | | | | |
| 1 | Hyde Park..... | .001 | .008 | .60 | .140 | 2 000 | No | | | | |
| 1 | Lake View..... | .001 | .012 | .60 | .280 | 640 | No | | | | |
| 3 | 14th Street..... | .001 | .002 | .60 | .140 | 220 | No | 481 | Sw | 0 | 77 |
| 3 | Chicago Avenue..... | Trace | .008 | .60 | .150 | 14 300 | No | | | | |
| 3 | Hyde Park..... | Trace | .001 | .60 | .140 | 6 800 | No | | | | |
| 3 | Lake View..... | .001 | .006 | .60 | .190 | 1 500 | No | | | | |
| 4 | 14th Street..... | .001 | .008 | .65 | .170 | 225 | Yes | 495 | S | 0 | 82 |
| 4 | Chicago Avenue..... | .001 | .004 | .60 | .150 | 280 | No | | | | |
| 4 | Hyde Park..... | Trace | .004 | .60 | .120 | 3 100 | No | | | | |
| 4 | Lake View..... | Trace | .006 | .65 | .230 | 320 | No | | | | |
| 5 | 14th Street..... | .001 | .008 | .65 | .150 | 75 000 | No | 499 | Sw | 0 | 84 |
| 5 | Chicago Avenue..... | Trace | .006 | .65 | .170 | 960 | No | | | | |
| 5 | Hyde Park..... | Trace | Trace | .60 | .120 | 4 000 | No | | | | |
| 5 | Lake View..... | .001 | .006 | .60 | .210 | 10 500 | No | | | | |
| 6 | 14th Street..... | .001 | Trace | .65 | .160 | 700 | No | 284 | S | 1.22 | 79 |
| 6 | Chicago Avenue..... | .001 | .006 | .65 | .150 | 275 | No | | | | |
| 6 | Hyde Park..... | Trace | Trace | .60 | .120 | 20 000 | No | | | | |
| 6 | Lake View..... | .001 | .016 | .65 | .270 | 13 000 | No | | | | |
| 7 | 14th Street..... | .001 | .006 | .60 | .160 | 6 000 | No | 250 | SeS | .02 | 77 |
| 7 | Chicago Avenue..... | .001 | .006 | .60 | .150 | 4 000 | No | | | | |
| 7 | Hyde Park..... | .001 | .008 | .60 | .150 | 5 000 | No | | | | |
| 7 | Lake View..... | .001 | .006 | .60 | .210 | 1 000 | No | | | | |
| 8 | 14th Street..... | Trace | .004 | .60 | .130 | 12 000 | No | 433 | Sw | Trace | 87 |
| 8 | Chicago Avenue..... | .001 | .002 | .60 | .120 | 1 500 | Yes | | | | |
| 8 | Hyde Park..... | Trace | Trace | .60 | .120 | 6 000 | No | | | | |
| 8 | Lake View..... | Trace | .001 | .60 | .170 | 16 000 | No | | | | |
| 10 | 14th Street..... | Trace | Trace | .60 | .130 | 280 | No | 293 | W | None | 86 |
| 10 | Chicago Avenue..... | Trace | .003 | .60 | .150 | 90 | No | | | | |
| 10 | Hyde Park..... | Trace | Trace | .60 | .130 | 2 000 | No | | | | |
| 10 | Lake View..... | Trace | .001 | .60 | .200 | 13 500 | No | | | | |
| 11 | 14th Street..... | Trace | .002 | .60 | .140 | 10 500 | Yes | 433 | Sw | Trace | 81 |
| 11 | Chicago Avenue..... | Trace | Trace | .60 | .150 | 19 000 | No | | | | |
| 11 | Hyde Park..... | Trace | Trace | .60 | .150 | 1 600 | Yes | | | | |
| 11 | Lake View..... | Trace | .005 | .60 | .180 | 2 400 | No | | | | |
| 12 | 14th Street..... | Trace | .010 | .65 | .150 | 140 | No | 227 | Ne | 1.22 | 73 |
| 12 | Chicago Avenue..... | Trace | Trace | .65 | .130 | 220 | No | | | | |
| 12 | Hyde Park..... | Trace | .001 | .60 | .150 | 3 000 | No | | | | |
| 12 | Lake View..... | Trace | .012 | .55 | .210 | 9 060 | Yes | | | | |
| 13 | 14th Street..... | .001 | .002 | .60 | .150 | 2 100 | No | 207 | Ne | None | 72 |
| 13 | Chicago Avenue..... | .001 | .003 | .60 | .140 | 700 | No | | | | |
| 13 | Hyde Park..... | Trace | .004 | .60 | .130 | 1 980 | Yes | | | | |
| 13 | Lake View..... | Trace | .002 | .60 | .180 | 1 610 | Yes | | | | |
| 14 | 14th Street..... | Trace | .004 | .60 | .130 | 1 250 | Yes | 270 | | Trace | 78 |
| 14 | Chicago Avenue..... | Trace | .002 | .60 | .130 | 3 000 | Yes | | | | |
| 14 | Hyde Park..... | .001 | .004 | .60 | .180 | 5 460 | No | | | | |
| 14 | Lake View..... | .001 | .003 | .60 | .140 | 6 200 | No | | | | |
| 15 | 14th Street..... | Trace | .002 | .60 | .140 | 270 | No | 271 | S | Trace | 76 |
| 15 | Chicago Avenue..... | .001 | .001 | .60 | .160 | 4 200 | No | | | | |
| 15 | Hyde Park..... | .001 | .004 | .60 | .130 | 3 400 | Yes | | | | |
| 15 | Lake View..... | .001 | .008 | .60 | .190 | 680 | No | | | | |

RESULTS OF DAILY EXAMINATIONS—Continued.

| AUGUST. | SOURCE OF SAMPLES. PUMPING STATIONS. | Free Am- monia. | Albuminoid Ammonia. | Chlorine. | Oxygen cons. in 10 min. at 100° C. | Bacteria per cc. | Pathogenic Bacteria. | METEOROLOGIC DATA 24-HOUR PERIODS. | | | | | | | | | | | |
|----------------------|---|---------------------------------|----------------------------------|--------------------------|--|--------------------------------------|-------------------------|---------------------------------------|----------------|------------------------------|---------------|-----|----|-------|----|-----|---|------|----|
| | | | | | | | | Wind move- ment. | Wind direc. | Precip- ita'n. inches. | Mean temp. | | | | | | | | |
| 17 17 17 17 | 14th Street Chicago Avenue Hyde Park Lake View | Trace Trace Trace .001 | Trace Trace Trace Trace | .60 .60 .60 .60 | .150 .130 .140 .260 | 1 900 3 100 1 800 1 250 | Yes No No Yes | 267 | Ne | None | 64 | | | | | | | | |
| 18 18 18 18 | 14th Street Chicago Avenue Hyde Park Lake View | Trace Trace Trace .001 | .006 .007 .007 .009 | .65 .65 .65 .65 | .130 .130 .130 .180 | 100 1 050 4 600 200 | No No Yes No | | | | | | | | | | | | |
| 19 19 19 19 | 14th Street Chicago Avenue Hyde Park Lake View | .003 Trace Trace .001 | .010 .002 .006 .006 | .65 .65 .65 .65 | .130 .130 .120 .180 | 240 360 1 420 3 100 | No No No No | | | | | 344 | Ne | None | 62 | | | | |
| 20 20 20 20 | 14th Street Chicago Avenue Hyde Park Lake View | .001 .001 Trace Trace | .003 .002 .001 .002 | .60 .60 .60 .60 | .130 .150 .140 .200 | 1 460 3 600 2 100 3 200 | No No No No | | | | | | | | | 292 | S | None | 68 |
| 21 21 21 21 | 14th Street Chicago Avenue Hyde Park Lake View | .001 .001 Trace Trace | .001 .001 Trace .003 | .60 .60 .60 .60 | .150 .170 .130 .160 | 1 200 3 700 980 1 900 | No No No No | 226 | Se | None | 71 | | | | | | | | |
| 22 22 22 22 | 14th Street Chicago Avenue Hyde Park Lake View | .001 .001 .001 .001 | .004 .001 .001 .005 | .60 .60 .60 .65 | .150 .140 .130 .160 | 1 270 1 150 810 9 000 | No No No No |  |  |  |  |  |  |  |  |  |  |  |  | 362 | W | .86 | 76 |
| 24 24 24 24 | 14th Street Chicago Avenue Hyde Park Lake View | Trace .001 Trace .001 | .003 Trace .002 .005 | .60 .60 .60 .60 | .150 .140 .140 .160 | 7 500 20 000 30 000 30 000 | No No No No | | | | | 379 | W | Trace | 66 | | | | |
| 25 25 25 25 | 14th Street Chicago Avenue Hyde Park Lake View | .001 Trace .001 .001 | .003 .005 .006 .008 | .60 .60 .60 .60 | .150 .140 .150 .210 | 5 000 45 000 13 000 7 500 | No Yes No No | | | | | | | | | 575 | S | None | 74 |
| 26 26 26 26 | 14th Street Chicago Avenue Hyde Park Lake View | Trace .001 Trace Trace | Trace .003 .001 .002 | .60 .60 .60 .60 | .150 .150 .140 .220 | 12 000 28 000 24 000 10 000 | No No No No | 387 | W | None | 66 | | | | | | | | |
| 27 27 27 27 | 14th Street Chicago Avenue Hyde Park Lake View | .001 .001 .001 .001 | .008 .006 .006 .006 | .60 .60 .60 .60 | .140 .150 .150 .160 | 7 500 300 3 000 26 000 | No No No Yes |  |  |  |  |  |  |  |  |  |  |  |  | 340 | Ne | None | 60 |
| 28 28 28 28 | 14th Street Chicago Avenue Hyde Park Lake View | .001 .001 .001 .001 | .006 .008 .006 .008 | .60 .60 .60 .60 | .150 .160 .140 .180 | 20 000 23 500 18 000 21 000 | No No No No | | | | | 227 | Se | None | 62 | | | | |
| 29 29 29 29 | 14th Street Chicago Avenue Hyde Park Lake View | .001 .001 .001 .001 | .006 .006 .006 .008 | .60 .60 .60 .60 | .150 .180 .170 .180 | 15 500 14 000 18 000 20 000 | No No No No | | | | | | | | | 419 | S | None | 70 |
| 31 31 31 31 | 14th Street Chicago Avenue Hyde Park Lake View | .001 .001 .001 .001 | .001 .002 .002 .012 | .60 .60 .60 .60 | .140 .180 .160 .290 | 9 000 7 000 16 000 5 000 | No No No No | 314 | Ne | None | 66 | | | | | | | | |

RESULTS OF DAILY EXAMINATIONS—*Continued.*

| SEPTEMBER | SOURCE OF SAMPLES. PUMPING STATIONS. | Free Am- monia. | Albuminoid Ammonia. | Chlorine. | Oxygen cons. in 10 min. at 100° C. | Bacteria per cc. | Pathogenic Bacteria. | METEOROLOGIC DATA 24-HOUR PERIODS. | | | |
|-----------|---|--------------------|------------------------|-----------|--|---------------------|-------------------------|---------------------------------------|----------------|------------------------------|---------------|
| | | | | | | | | Wind move- ment. | Wind direc. | Precip- ita'n, inches. | Mean temp. |
| 1 | 14th Street | .001 | .001 | .60 | .160 | 7 000 | No | 419 | Se | None | 66 |
| 1 | Chicago Avenue | .001 | .004 | .65 | .160 | 6 200 | No | | | | |
| 1 | Hyde Park | .001 | .006 | .60 | .140 | 20 500 | No | | | | |
| 1 | Lake View | .001 | .035 | .70 | .500 | 60 000 | No | | | | |
| 2 | 14th Street | .001 | .012 | .60 | .130 | 30 000 | No | 602 | S | None | 72 |
| 2 | Chicago Avenue | .001 | .010 | .60 | .160 | 6 400 | No | | | | |
| 2 | Hyde Park | Trace | .012 | .60 | .120 | 3 000 | No | | | | |
| 2 | Lake View | .091 | .020 | .60 | .220 | 7 500 | No | | | | |
| 3 | 14th Street | .001 | .012 | .60 | .130 | 200 | No | 518 | N | .17 | 63 |
| 3 | Chicago Avenue | .001 | .010 | .60 | .160 | 700 | No | | | | |
| 3 | Hyde Park | Trace | .012 | .60 | .120 | 400 | No | | | | |
| 3 | Lake View | .001 | .020 | .60 | .230 | 640 | No | | | | |
| 4 | 14th Street | .001 | .006 | .60 | .190 | 500 | No | 311 | E | Trace | 60 |
| 4 | Chicago Avenue | Trace | .002 | .60 | .180 | 600 | No | | | | |
| 4 | Hyde Park | .001 | .004 | .60 | .150 | 8 000 | No | | | | |
| 4 | Lake View | .001 | .035 | .60 | .650 | 5 000 | No | | | | |
| 5 | 14th Street | .001 | .008 | .60 | .170 | 900 | No | 371 | W | .22 | 60 |
| 5 | Chicago Avenue | .001 | .006 | .60 | .170 | 38 000 | No | | | | |
| 5 | Hyde Park | .001 | .006 | .60 | .160 | 400 | No | | | | |
| 5 | Lake View | .001 | .012 | .60 | .210 | 9 500 | No | | | | |
| 7 | 14th Street | .001 | .008 | .60 | .150 | 900 | No | 349 | S | None | 64 |
| 7 | Chicago Avenue | .001 | .006 | .60 | .170 | 5 000 | No | | | | |
| 7 | Hyde Park | .001 | .011 | .60 | .150 | 6 000 | No | | | | |
| 7 | Lake View | .001 | .012 | .60 | .200 | 18 000 | No | | | | |
| 8 | 14th Street | .001 | .013 | .60 | .150 | 2 700 | No | 501 | S | None | 68 |
| 8 | Chicago Avenue | .001 | .010 | .60 | .170 | 2 500 | No | | | | |
| 8 | Hyde Park | .001 | .012 | .60 | .150 | 18 500 | No | | | | |
| 8 | Lake View | .001 | .012 | .60 | .200 | 300 | No | | | | |
| 9 | 14th Street | .001 | .001 | .60 | .150 | 3 000 | No | 469 | W | None | 76 |
| 9 | Chicago Avenue | .001 | .001 | .60 | .160 | 9 000 | No | | | | |
| 9 | Hyde Park | .001 | .001 | .60 | .150 | 7 500 | No | | | | |
| 9 | Lake View | .001 | .001 | .60 | .140 | 7 300 | No | | | | |
| 10 | 14th Street | .001 | .003 | .60 | .150 | 50 000 | No | 415 | S | None | 76 |
| 10 | Chicago Avenue | .001 | .006 | .60 | .170 | 7 500 | No | | | | |
| 10 | Hyde Park | .001 | .006 | .60 | .160 | 32 000 | No | | | | |
| 10 | Lake View | .001 | .010 | .60 | .210 | 2 500 | No | | | | |
| 11 | 14th Street | .001 | .003 | .60 | .160 | 5 000 | No | 387 | N | .11 | 60 |
| 11 | Chicago Avenue | .001 | .004 | .60 | .160 | 25 000 | No | | | | |
| 11 | Hyde Park | .001 | .002 | .60 | .140 | 50 000 | No | | | | |
| 11 | Lake View | .001 | .012 | .60 | .240 | 9 000 | No | | | | |
| 12 | 14th Street | .001 | .010 | .60 | .170 | 20 000 | No | 416 | Ne | .37 | 64 |
| 12 | Chicago Avenue | .001 | .006 | .60 | .180 | 30 000 | No | | | | |
| 12 | Hyde Park | .001 | .012 | .65 | .190 | 5 100 | No | | | | |
| 12 | Lake View | .001 | .012 | .60 | .200 | 16 700 | No | | | | |
| 14 | 14th Street | .001 | .012 | .60 | .170 | 8 000 | Yes | 268 | N | 2.42 | 66 |
| 14 | Chicago Avenue | .001 | .012 | .60 | .160 | 5 000 | No | | | | |
| 14 | Hyde Park | .001 | .010 | .60 | .160 | 200 | No | | | | |
| 14 | Lake View | .001 | .010 | .65 | .210 | 4 500 | Yes | | | | |
| 15 | 14th Street | .001 | .004 | .60 | .150 | 8 000 | No | 496 | N | Trace | 63 |
| 15 | Chicago Avenue | .001 | .004 | .60 | .160 | 200 | No | | | | |
| 15 | Hyde Park | .001 | .004 | .60 | .140 | 640 | No | | | | |
| 15 | Lake View | .001 | .008 | .60 | .170 | 24 000 | No | | | | |

RESULTS OF DAILY EXAMINATIONS—Continued.

| SEPTEMBER | SOURCE OF SAMPLES. PUMPING STATIONS. | Free Am- monia. | Albuminoid Ammonia. | Chlorine. | Oxygen cons. in 10 min. at 100° C. | Bacteria per cc. | Pathogenic Bacteria. | METEOROLOGIC DATA 24-HOUR PERIODS. | | | |
|-----------|---|--------------------|------------------------|-----------|--|---------------------|-------------------------|---------------------------------------|----------------|------------------------------|---------------|
| | | | | | | | | Wind move- ment. | Wind direc. | Precip- ita n, inches. | Mean temp. |
| 16 | 14th Street | .001 | .004 | .60 | .150 | 6 200 | No | 267 | S | Trace | 66 |
| 16 | Chicago Avenue | .001 | .006 | .60 | .170 | 17 500 | No | | | | |
| 16 | Hyde Park | .001 | .010 | .60 | .130 | 3 500 | No | | | | |
| 16 | Lake View | .001 | .006 | .60 | .130 | 16 000 | No | | | | |
| 17 | 14th Street | .001 | .006 | .60 | .130 | 1 700 | No | 227 | N | None | 62 |
| 17 | Chicago Avenue | .001 | .012 | .60 | .150 | 9 200 | No | | | | |
| 17 | Hyde Park | .001 | .012 | .60 | .130 | 100 | No | | | | |
| 17 | Lake View | .001 | .010 | .60 | .160 | 600 | No | | | | |
| 18 | 14th Street | .001 | .006 | .65 | .140 | 30 000 | No | 201 | W | .59 | 58 |
| 18 | Chicago Avenue | .001 | .004 | .65 | .150 | 500 | No | | | | |
| 18 | Hyde Park | .001 | .002 | .65 | .150 | 1 900 | No | | | | |
| 18 | Lake View | .001 | .003 | .65 | .170 | 4 500 | No | | | | |
| 19 | 14th Street | .001 | .010 | .65 | .180 | 500 | No | 427 | NNw | .04 | 50 |
| 19 | Chicago Avenue | .001 | .002 | .65 | .150 | 1 600 | No | | | | |
| 19 | Hyde Park | .001 | .010 | .65 | .130 | 7 500 | No | | | | |
| 19 | Lake View | .001 | .008 | .65 | .180 | 6 000 | No | | | | |
| 21 | 14th Street | .001 | .006 | .60 | .140 | 9 700 | No | 282 | W | None | 58 |
| 21 | Chicago Avenue | .001 | .006 | .60 | .160 | 3 600 | No | | | | |
| 21 | Hyde Park | .001 | .006 | .60 | .160 | 18 000 | No | | | | |
| 21 | Lake View | .001 | .006 | .60 | .160 | 150 | No | | | | |
| 22 | 14th Street | Trace | .006 | .65 | .160 | 2 700 | No | 559 | N | Trace | 47 |
| 22 | Chicago Avenue | .001 | .008 | .65 | .180 | 9 100 | No | | | | |
| 22 | Hyde Park | .001 | .008 | .65 | .180 | 200 | No | | | | |
| 22 | Lake View | .001 | .010 | .65 | .240 | 13 000 | No | | | | |
| 23 | 14th Street | .001 | .012 | .65 | .170 | 200 | No | 349 | Sw | None | 50 |
| 23 | Chicago Avenue | .001 | .010 | .65 | .170 | 9 800 | Yes | | | | |
| 23 | Hyde Park | .001 | .010 | .65 | .150 | 5 900 | No | | | | |
| 23 | Lake View | .001 | .012 | .65 | .230 | 42 000 | Yes | | | | |
| 24 | 14th Street | .001 | .006 | .60 | .140 | 200 | No | 514 | S | None | 58 |
| 24 | Chicago Avenue | .001 | .007 | .60 | .170 | 10 500 | No | | | | |
| 24 | Hyde Park | .001 | .006 | .60 | .130 | 4 400 | Yes | | | | |
| 24 | Lake View | .001 | .010 | .60 | .170 | 9 000 | No | | | | |
| 25 | 14th Street | .001 | .010 | .60 | .140 | 20 | Yes | 410 | Sw | .06 | 63 |
| 25 | Chicago Avenue | .001 | .012 | .60 | .170 | 19 900 | No | | | | |
| 25 | Hyde Park | .001 | .011 | .60 | .170 | 5 400 | Yes | | | | |
| 25 | Lake View | .001 | .010 | .60 | .180 | 50 000 | Yes | | | | |
| 26 | 14th Street | .001 | .012 | .60 | .150 | 200 | No | 281 | Ne | Trace | 58 |
| 26 | Chicago Avenue | .001 | .008 | .60 | .170 | 10 200 | Yes | | | | |
| 26 | Hyde Park | .001 | .011 | .60 | .150 | 20 000 | Yes | | | | |
| 26 | Lake View | .003 | .012 | .60 | .180 | 60 000 | No | | | | |
| 28 | 14th Street | .001 | .006 | .60 | .170 | 125 | No | 586 | Ne | None | 52 |
| 28 | Chicago Avenue | .001 | .008 | .60 | .150 | 11 500 | No | | | | |
| 28 | Hyde Park | .001 | .006 | .60 | .140 | 1 200 | No | | | | |
| 28 | Lake View | .001 | .010 | .60 | .200 | 13 000 | Yes | | | | |
| 29 | 14th Street | .001 | .015 | .60 | .220 | 3 700 | No | 381 | N | .30 | 52 |
| 29 | Chicago Avenue | .001 | .012 | .60 | .200 | 16 800 | Yes | | | | |
| 29 | Hyde Park | .001 | .012 | .60 | .210 | 17 800 | Yes | | | | |
| 29 | Lake View | .001 | .015 | .60 | .190 | 1 040 | Yes | | | | |
| 30 | 14th Street | .001 | .014 | .60 | .200 | 700 | Yes | 542 | Nw | 1.27 | 56 |
| 30 | Chicago Avenue | .001 | .014 | .60 | .170 | 1 000 | Yes | | | | |
| 30 | Hyde Park | .001 | .014 | .60 | .190 | 320 | Yes | | | | |
| 30 | Lake View | .001 | .015 | .60 | .310 | 8 300 | Yes | | | | |

RESULTS OF DAILY EXAMINATIONS—*Continued.*

| OCTOBER. | SOURCE OF SAMPLES. PUMPING STATIONS. | Free Am- monia. | Albuminoid Ammonia. | Chlorine. | Oxygen cons in 10 min. at 100° C. | Bacteria per cc. | Pathogenic Bacteria. | METEOROLOGIC DATA 24-HOUR PERIODS. | | | |
|----------|---|--------------------|------------------------|-----------|---|---------------------|-------------------------|---------------------------------------|----------------|------------------------------|---------------|
| | | | | | | | | Wind move- ment. | Wind direc. | Precip- ita'n, inches. | Mean temp. |
| 1 | 14th Street | .001 | .010 | .60 | .160 | 400 | No | 391 | Ne | None | 54 |
| 1 | Chicago Avenue | .001 | .012 | .60 | .180 | 9 500 | Yes | | | | |
| 1 | Hyde Park | .001 | .012 | .60 | .190 | 3 600 | Yes | | | | |
| 1 | Lake View | .001 | .012 | .60 | .250 | 50 | No | | | | |
| 2 | 14th Street | .001 | .012 | .60 | .170 | 1 000 | No | 296 | N | None | 54 |
| 2 | Chicago Avenue | .001 | .012 | .60 | .170 | 5 500 | No | | | | |
| 2 | Hyde Park | .001 | .011 | .60 | .190 | 960 | No | | | | |
| 2 | Lake View | .001 | .013 | .60 | .250 | 8 500 | No | | | | |
| 3 | 14th Street | .001 | .013 | .60 | .170 | 28 900 | No | 248 | N | None | 56 |
| 3 | Chicago Avenue | .001 | .013 | .60 | .170 | 10 500 | No | | | | |
| 3 | Hyde Park | .001 | .014 | .60 | .170 | 12 400 | No | | | | |
| 3 | Lake View | .001 | .013 | .60 | .190 | 8 300 | No | | | | |
| 5 | 14th Street | .001 | .010 | .60 | .180 | 6 500 | No | 395 | S | None | 58 |
| 5 | Chicago Avenue | .001 | .010 | .60 | .180 | 23 300 | No | | | | |
| 5 | Hyde Park | .001 | .014 | .60 | .190 | 9 300 | No | | | | |
| 5 | Lake View | .001 | .012 | .60 | .180 | 46 000 | No | | | | |
| 6 | 14th Street | .001 | .013 | .60 | .190 | 12 000 | No | 472 | N | None | 50 |
| 6 | Chicago Avenue | .001 | .015 | .60 | .190 | 7 500 | No | | | | |
| 6 | Hyde Park | .001 | .014 | .60 | .170 | 1 000 | No | | | | |
| 6 | Lake View | .001 | .015 | .60 | .210 | 19 500 | No | | | | |
| 7 | 14th Street | .001 | .012 | .60 | .180 | 17 300 | No | 365 | N | None | 42 |
| 7 | Chicago Avenue | .001 | .008 | .60 | .190 | 20 500 | No | | | | |
| 7 | Hyde Park | .001 | .009 | .60 | .160 | 9 400 | No | | | | |
| 7 | Lake View | .001 | .010 | .60 | .240 | 2 800 | No | | | | |
| 8 | 14th Street | .001 | .011 | .60 | .180 | 6 400 | No | 382 | Se | None | 43 |
| 8 | Chicago Avenue | .001 | .008 | .60 | .160 | 11 950 | No | | | | |
| 8 | Hyde Park | .001 | .010 | .60 | .170 | 4 200 | No | | | | |
| 8 | Lake View | .001 | .009 | .60 | .190 | 5 760 | No | | | | |
| 9 | 14th Street | .001 | .010 | .60 | .170 | 6 000 | No | 671 | Se | None | 50 |
| 9 | Chicago Avenue | Trace | .009 | .60 | .180 | 1 700 | No | | | | |
| 9 | Hyde Park | .001 | .011 | .60 | .190 | 1 800 | No | | | | |
| 9 | Lake View | .001 | .011 | .60 | .190 | 19 200 | No | | | | |
| 10 | 14th Street | .001 | .013 | .60 | .170 | 15 600 | No | 489 | Se | None | 56 |
| 10 | Chicago Avenue | .001 | .010 | .60 | .190 | 17 500 | No | | | | |
| 10 | Hyde Park | .001 | .012 | .60 | .160 | 21 000 | No | | | | |
| 10 | Lake View | .001 | .017 | .60 | .280 | 250 | No | | | | |
| 12 | 14th Street | .001 | .010 | .60 | .170 | 600 | No | 525 | E | None | 53 |
| 12 | Chicago Avenue | .001 | .010 | .60 | .180 | 11 800 | No | | | | |
| 12 | Hyde Park | .001 | .011 | .60 | .150 | 3 800 | No | | | | |
| 12 | Lake View | .001 | .013 | .60 | .220 | 16 300 | No | | | | |
| 13 | 14th Street | .001 | .015 | .60 | .140 | 100 | No | 274 | N | None | 54 |
| 13 | Chicago Avenue | .001 | .015 | .60 | .150 | 19 600 | No | | | | |
| 13 | Hyde Park | .001 | .015 | .60 | .160 | 125 | No | | | | |
| 13 | Lake View | .001 | .012 | .60 | .180 | 13 000 | No | | | | |
| 14 | 14th Street | .001 | .009 | .60 | .130 | 25 | No | 278 | N | None | 56 |
| 14 | Chicago Avenue | .001 | .011 | .60 | .130 | 1 840 | No | | | | |
| 14 | Hyde Park | .001 | .010 | .60 | .140 | 2 800 | No | | | | |
| 14 | Lake View | .001 | .012 | .60 | .200 | 160 | No | | | | |
| 15 | 14th Street | .001 | .007 | .60 | .140 | 250 | No | 463 | W | None | 58 |
| 15 | Chicago Avenue | .001 | .011 | .60 | .160 | 4 100 | No | | | | |
| 15 | Hyde Park | .001 | .010 | .60 | .140 | 2 800 | No | | | | |
| 15 | Lake View | .001 | .011 | .60 | .170 | 25 000 | No | | | | |
| 16 | 14th Street | .001 | .009 | .60 | .140 | 23 000 | No | 279 | N | None | 58 |
| 16 | Chicago Avenue | .001 | .011 | .60 | .170 | 6 500 | No | | | | |
| 16 | Hyde Park | .001 | .010 | .60 | .170 | 640 | No | | | | |
| 16 | Lake View | .001 | .016 | .60 | .370 | 14 300 | No | | | | |

RESULTS OF DAILY EXAMINATIONS—*Continued.*

| OCTOBER. | SOURCE OF SAMPLES. PUMPING STATIONS. | Free Am- monia. | Albuminoid Ammonia. | Chlorine. | Oxygen cons. in 10 min. at 100° C. | Bacteria per cc. | Pathogenic Bacteria | METEOROLOGIC DATA 24-HOUR PERIODS. | | | |
|----------|---|--------------------|------------------------|-----------|--|---------------------|------------------------|---------------------------------------|----------------|------------------------------|---------------|
| | | | | | | | | Wind move- ment. | Wind direc. | Precip- ita'n, inches. | Mean temp. |
| 17 | 14th Street | .001 | .013 | .60 | .170 | 1 500 | No | 331 | Nw | .92 | 40 |
| 17 | Chicago Avenue | .001 | .010 | .60 | .160 | 3 500 | No | | | | |
| 17 | Hyde Park | .001 | .013 | .60 | .200 | 100 | No | | | | |
| 17 | Lake View | .001 | .017 | .60 | .310 | 45 000 | No | | | | |
| 19 | 14th Street | .001 | .010 | .60 | .150 | 250 | No | 425 | S | .02 | 38 |
| 19 | Chicago Avenue | .001 | .010 | .60 | .130 | 100 | No | | | | |
| 19 | Hyde Park | .001 | .009 | .60 | .160 | 2 200 | No | | | | |
| 19 | Lake View | .001 | .009 | .60 | .170 | 50 | No | | | | |
| 20 | 14th Street | .001 | .009 | .60 | .150 | 3 200 | No | 260 | W | None | 36 |
| 20 | Chicago Avenue | .001 | .009 | .60 | .150 | 1 000 | No | | | | |
| 20 | Hyde Park | .001 | .012 | .60 | .140 | 4 600 | No | | | | |
| 20 | Lake View | .001 | .012 | .60 | .210 | 200 | No | | | | |
| 21 | 14th Street | .001 | .011 | .60 | .180 | 3 000 | No | 257 | W | None | 36 |
| 21 | Chicago Avenue | .001 | .010 | .60 | .170 | 13 500 | No | | | | |
| 21 | Hyde Park | .001 | .014 | .60 | .170 | 14 200 | No | | | | |
| 21 | Lake View | .001 | .010 | .60 | .190 | 4 400 | No | | | | |
| 22 | 14th Street | .001 | .013 | .60 | .170 | 1 500 | No | 206 | Nw | None | 44 |
| 22 | Chicago Avenue | .001 | .013 | .60 | .170 | 6 500 | No | | | | |
| 22 | Hyde Park | .001 | .013 | .60 | .180 | 10 300 | No | | | | |
| 22 | Lake View | .001 | .013 | .60 | .210 | 9 500 | No | | | | |
| 23 | 14th Street | .001 | .013 | .60 | .180 | 640 | No | 315 | W | None | 42 |
| 23 | Chicago Avenue | .001 | .008 | .60 | .160 | 4 000 | No | | | | |
| 23 | Hyde Park | .001 | .008 | .60 | .150 | 240 | No | | | | |
| 23 | Lake View | .001 | .008 | .60 | .180 | 5 500 | No | | | | |
| 24 | 14th Street | .001 | .013 | .60 | .150 | 500 | No | 297 | N | None | 37 |
| 24 | Chicago Avenue | .001 | .010 | .60 | .140 | 1 800 | No | | | | |
| 24 | Hyde Park | .001 | .010 | .60 | .170 | 1 800 | No | | | | |
| 24 | Lake View | .001 | .011 | .60 | .170 | 2 700 | No | | | | |
| 25 | 14th Street | .001 | .011 | .60 | .150 | 8 300 | No | 425 | Sw | None | 54 |
| 25 | Chicago Avenue | .001 | .011 | .60 | .150 | 25 000 | No | | | | |
| 25 | Hyde Park | .001 | .009 | .60 | .150 | 17 500 | No | | | | |
| 25 | Lake View | .001 | .009 | .60 | .170 | 30 000 | No | | | | |
| 27 | 14th Street | .001 | .009 | .60 | .130 | 14 500 | No | 400 | S | None | 59 |
| 27 | Chicago Avenue | .001 | .015 | .60 | .250 | 37 500 | No | | | | |
| 27 | Hyde Park | .001 | .010 | .60 | .180 | 14 500 | No | | | | |
| 27 | Lake View | .001 | .010 | .60 | .120 | 18 000 | No | | | | |
| 28 | 14th Street | Trace | .032 | .60 | .140 | 12 500 | No | 446 | S | .26 | 66 |
| 28 | Chicago Avenue | Trace | .022 | .65 | .160 | 8 500 | No | | | | |
| 28 | Hyde Park | Trace | .023 | .70 | .200 | 13 000 | No | | | | |
| 28 | Lake View | Trace | .035 | .60 | .190 | 3 500 | No | | | | |
| 29 | 14th Street | Trace | .015 | .70 | .140 | 1 500 | No | 594 | S | .04 | 65 |
| 29 | Chicago Avenue | Trace | .015 | .70 | .150 | 5 000 | No | | | | |
| 29 | Hyde Park | Trace | .016 | .70 | .160 | 4 000 | No | | | | |
| 29 | Lake View | Trace | .021 | .70 | .200 | 4 500 | No | | | | |
| 30 | 14th Street | Trace | .005 | .65 | .150 | 3 500 | No | 743 | Sw | .11 | 47 |
| 30 | Chicago Avenue | Trace | .007 | .65 | .170 | 1 800 | No | | | | |
| 30 | Hyde Park | Trace | .006 | .65 | .150 | 100 | No | | | | |
| 30 | Lake View | Trace | .006 | .65 | .140 | 2 000 | No | | | | |
| 31 | 14th Street | Trace | .010 | .65 | .170 | 20 000 | No | 591 | W | .01 | 43 |
| 31 | Chicago Avenue | Trace | .007 | .65 | .170 | 50 | No | | | | |
| 31 | Hyde Park | Trace | .007 | .65 | .150 | 60 | No | | | | |
| 31 | Lake View | Trace | .010 | .65 | .150 | 800 | No | | | | |

RESULTS OF DAILY EXAMINATIONS—*Continued.*

| NOVEMBER. | SOURCE OF PUMPING STATIONS. | Free Am- monia. | Albuminoid Ammonia. | Chlorine. | Oxygen cons. in 10 min. at 100° C. | Bacteria per cc. | Pathogenic Bacteria. | METEOROLOGIC DATA 24-HOUR PERIODS. | | | |
|-----------|-----------------------------------|--------------------|------------------------|-----------|--|---------------------|-------------------------|---------------------------------------|----------------|------------------------------|---------------|
| | | | | | | | | Wind Move- ment. | Wind direc. | Precip- ita'n, inches. | Mean temp. |
| 2 | 14th Street | Trace | .007 | .60 | .130 | 840 | No | 539 | S | .05 | 50 |
| 2 | Chicago Avenue | Trace | .009 | .60 | .160 | 400 | No | | | | |
| 2 | Hyde Park | Trace | .006 | .60 | .130 | 2 000 | No | | | | |
| 2 | Lake View | Trace | .007 | .60 | .150 | 100 | No | | | | |
| 4 | 14th Street | Trace | .004 | .60 | .100 | 1 000 | No | 325 | N | .37 | 49 |
| 4 | Chicago Avenue | Trace | .008 | .60 | .140 | 1 200 | No | | | | |
| 4 | Hyde Park | Trace | .005 | .60 | .120 | 50 | No | | | | |
| 4 | Lake View | Trace | .006 | .60 | .150 | 4 000 | No | | | | |
| 5 | 14th Street | Trace | .005 | .60 | .140 | 1 000 | No | 533 | W | .20 | 34 |
| 5 | Chicago Avenue | Trace | .006 | .60 | .170 | 5 000 | No | | | | |
| 5 | Hyde Park | Trace | .005 | .60 | .140 | 130 | No | | | | |
| 5 | Lake View | Trace | .006 | .60 | .170 | 200 | No | | | | |
| 6 | 14th Street | Trace | .007 | .60 | .170 | 4 500 | No | 260 | Se | None | 36 |
| 6 | Chicago Avenue | Trace | .008 | .60 | .160 | 2 600 | No | | | | |
| 6 | Hyde Park | Trace | .005 | .60 | .160 | 150 | No | | | | |
| 6 | Lake View | Trace | .011 | .60 | .250 | 4 300 | No | | | | |
| 7 | 14th Street | Trace | .005 | .60 | .120 | 4 000 | No | 575 | W | Trace | 34 |
| 7 | Chicago Avenue | Trace | .006 | .60 | .170 | 400 | No | | | | |
| 7 | Hyde Park | Trace | .006 | .60 | .120 | 75 | No | | | | |
| 7 | Lake View | Trace | .010 | .60 | .180 | 150 | No | | | | |
| 9 | 14th Street | Trace | .007 | .60 | .160 | 1 000 | No | 465 | S | Trace | 30 |
| 9 | Chicago Avenue | Trace | .008 | .60 | .180 | 44 000 | No | | | | |
| 9 | Hyde Park | Trace | .005 | .60 | .130 | 150 | No | | | | |
| 9 | Lake View | Trace | .005 | .60 | .140 | 200 | No | | | | |
| 10 | 14th Street | Trace | .005 | .60 | .120 | 1 300 | No | 683 | S | .10 | 42 |
| 10 | Chicago Avenue | Trace | .006 | .60 | .160 | 7 500 | No | | | | |
| 10 | Hyde Park | Trace | .008 | .60 | .140 | 150 | No | | | | |
| 10 | Lake View | Trace | .007 | .60 | .130 | 1 200 | No | | | | |
| 11 | 14th Street | Trace | .010 | .60 | .230 | 1 280 | No | 514 | W | Trace | 38 |
| 11 | Chicago Avenue | None | .012 | .60 | .380 | 1 300 | No | | | | |
| 11 | Hyde Park | None | .008 | .60 | .220 | 1 200 | No | | | | |
| 11 | Lake View | Trace | .016 | .60 | .230 | 200 | No | | | | |
| 12 | 14th Street | .002 | .009 | .60 | .210 | 175 | No | 296 | W | None | 28 |
| 12 | Chicago Avenue | .001 | .008 | .60 | .190 | 470 | No | | | | |
| 12 | Hyde Park | None | .013 | .60 | .200 | 4 250 | No | | | | |
| 12 | Lake View | None | .009 | .60 | .220 | 800 | No | | | | |
| 13 | 14th Street | Trace | .014 | .60 | .180 | 72 | No | 259 | Nw | None | 24 |
| 13 | Chicago Avenue | None | .012 | .60 | .190 | 1 700 | No | | | | |
| 13 | Hyde Park | .002 | .017 | .60 | .220 | 2 400 | No | | | | |
| 13 | Lake View | None | .016 | .60 | .180 | 4 700 | No | | | | |
| 14 | 14th Street | None | .005 | .60 | .150 | 4 350 | No | 575 | S | None | 41 |
| 14 | Chicago Avenue | None | .005 | .60 | .150 | 95 | No | | | | |
| 14 | Hyde Park | None | .006 | .60 | .180 | 1 300 | No | | | | |
| 14 | Lake View | .001 | .010 | .60 | .160 | 710 | No | | | | |
| 16 | 14th Street | None | .032 | .70 | .210 | 550 | No | 774 | Sw | None | 60 |
| 16 | Chicago Avenue | None | .055 | .70 | .280 | 29 000 | No | | | | |
| 16 | Hyde Park | None | .036 | .70 | .190 | 8 000 | No | | | | |
| 16 | Lake View | Trace | .075 | .70 | .240 | 28 000 | No | | | | |
| 17 | 14th Street | Trace | .018 | .60 | .180 | 7 500 | No | 374 | Sw | None | 55 |
| 17 | Chicago Avenue | .002 | .018 | .60 | .180 | 7 400 | No | | | | |
| 17 | Hyde Park | .002 | .016 | .60 | .190 | 6 500 | No | | | | |
| 17 | Lake View | .001 | .020 | .60 | .210 | 28 000 | No | | | | |

RESULTS OF DAILY EXAMINATIONS—*Continued.*

| NOVEMBER. | SOURCE OF SAMPLES. PUMPING STATIONS. | Free Am- monia. | Albuminoid Ammonia. | Chlorine. | Oxygen cons. in 10 min. at 100° C. | Bacteria per cc. | Pathogenic Bacteria. | METEOROLOGIC DATA 24-HOUR PERIODS. | | | |
|-----------|---|--------------------|------------------------|-----------|--|---------------------|-------------------------|---------------------------------------|----------------|------------------------------|---------------|
| | | | | | | | | Wind move- ment. | Wind direc. | Precip- ita'n. inches. | Mean temp. |
| 18 | 14th Street | Trace | .005 | .60 | .180 | 8 250 | No | 596 | Sw | .04 | 48 |
| 18 | Chicago Avenue | .002 | .010 | .60 | .200 | 9 000 | No | | | | |
| 18 | Hyde Park | Trace | .004 | .60 | .180 | 3 750 | No | | | | |
| 18 | Lake View | None | .015 | .60 | .170 | 6 250 | No | | | | |
| 19 | 14th Street | Trace | .008 | .60 | .150 | 125 | No | 443 | N | None | 30 |
| 19 | Chicago Avenue | .004 | .008 | .60 | .160 | 180 | No | | | | |
| 19 | Hyde Park | Trace | .008 | .60 | .150 | 175 | No | | | | |
| 19 | Lake View | Trace | .008 | .60 | .180 | 18 700 | No | | | | |
| 20 | 14th Street | Trace | .009 | .60 | .190 | 300 | No | 517 | E | None | 32 |
| 20 | Chicago Avenue | .001 | .014 | .60 | .190 | 550 | No | | | | |
| 20 | Hyde Park | .002 | .013 | .60 | .180 | 600 | No | | | | |
| 20 | Lake View | Trace | .009 | .60 | .190 | 1 750 | No | | | | |
| 21 | 14th Street | Trace | .009 | .60 | .160 | 6 500 | No | 372 | Nw | .38 | 32 |
| 21 | Chicago Avenue | None | .009 | .60 | .160 | 450 | No | | | | |
| 21 | Hyde Park | .004 | .012 | .60 | .160 | 500 | No | | | | |
| 21 | Lake View | .002 | .018 | .60 | .180 | 1 000 | No | | | | |
| 23 | 14th Street | .003 | .018 | .60 | .180 | 700 | No | 530 | S | .15 | 42 |
| 23 | Chicago Avenue | .004 | .020 | .60 | .180 | 400 | No | | | | |
| 23 | Hyde Park | Trace | .015 | .60 | .250 | 24 000 | No | | | | |
| 23 | Lake View | Trace | .028 | .60 | .250 | 100 | No | | | | |
| 24 | 14th Street | Trace | .011 | .60 | .140 | 180 | No | 312 | Ne | .03 | 44 |
| 24 | Chicago Avenue | Trace | .012 | .60 | .150 | 160 | No | | | | |
| 24 | Hyde Park | Trace | .007 | .60 | .150 | 10 000 | No | | | | |
| 24 | Lake View | .005 | .011 | .60 | .200 | 1 450 | No | | | | |
| 25 | 14th Street | Trace | .006 | .60 | .160 | 4 750 | No | 613 | S | .04 | 52 |
| 25 | Chicago Avenue | Trace | .008 | .60 | .210 | 15 750 | No | | | | |
| 25 | Hyde Park | .001 | .010 | .60 | .190 | 7 500 | No | | | | |
| 25 | Lake View | Trace | .009 | .60 | .230 | 11 250 | No | | | | |
| 27 | 14th Street | Trace | .005 | .60 | .130 | 2 800 | No | 693 | W | Trace | 36 |
| 27 | Chicago Avenue | Trace | .007 | .60 | .160 | 1 800 | No | | | | |
| 27 | Hyde Park | Trace | .005 | .60 | .170 | 4 500 | No | | | | |
| 27 | Lake View | Trace | .006 | .60 | .150 | 10 500 | No | | | | |
| 28 | 14th Street | Trace | .006 | .60 | .130 | 80 | No | 352 | W | None | 12 |
| 28 | Chicago Avenue | Trace | .006 | .60 | .160 | 8 000 | No | | | | |
| 28 | Hyde Park | Trace | .0 6 | .60 | .180 | 6 250 | No | | | | |
| 28 | Lake View | Trace | .010 | .60 | .190 | 550 | No | | | | |
| 30 | 14th Street | Trace | .007 | .60 | .280 | 50 | No | 367 | W | None | 10 |
| 30 | Chicago Avenue | Trace | .008 | .60 | .220 | 37 | No | | | | |
| 30 | Hyde Park | Trace | .006 | .60 | .210 | 1 250 | No | | | | |
| 30 | Lake View | Trace | .008 | .60 | .260 | 80 | No | | | | |

RESULTS OF DAILY EXAMINATIONS—*Continued.*

| DECEMBER. | SOURCE OF SAMPLES. PUMPING STATIONS. | Free Am- monia. | Albuminoid Ammonia. | Chlorine. | Oxygen cons. in 10 min. at 100° C. | Bacteria per cc. | Pathogenic Bacteria. | METEOROLOGIC DATA 24-HOUR PERIODS. | | | |
|-----------|---|--------------------|------------------------|-----------|--|---------------------|-------------------------|---------------------------------------|----------------|------------------------------|---------------|
| | | | | | | | | Wind move- ment. | Wind direc. | Precip- ita'n, inches. | Mean temp. |
| 1 | 14th Street | Trace | .008 | .60 | .190 | 1 300 | No | 194 | Nw | None | 16 |
| 1 | Chicago Avenue | Trace | .009 | .60 | .210 | 350 | No | | | | |
| 1 | Hyde Park..... | Trace | .008 | .60 | .200 | 1 800 | No | | | | |
| 1 | Lake View.... | Trace | .009 | .60 | .230 | 900 | No | | | | |
| 2 | 14th Street | Trace | .006 | .60 | .210 | 1 250 | No | 193 | S | None | 22 |
| 2 | Chicago Avenue | Trace | .009 | .60 | .240 | 1 250 | No | | | | |
| 2 | Hyde Park..... | Trace | .005 | .60 | .170 | 7 250 | No | | | | |
| 2 | Lake View..... | Trace | .007 | .60 | .300 | 3 200 | No | | | | |
| 3 | 14th Street | Trace | .008 | .60 | .180 | 800 | No | 431 | S | None | 26 |
| 3 | Chicago Avenue | Trace | .011 | .60 | .250 | 2 000 | No | | | | |
| 3 | Hyde Park..... | Trace | .009 | .60 | .220 | 5 300 | No | | | | |
| 3 | Lake View..... | Trace | .008 | .60 | .190 | 500 | No | | | | |
| 4 | 14th Street | Trace | .007 | .60 | .160 | 800 | No | 532 | S | .06 | 28 |
| 4 | Chicago Avenue | Trace | .010 | .60 | .240 | 1 500 | No | | | | |
| 4 | Hyde Park..... | Trace | .007 | .60 | .220 | 8 000 | No | | | | |
| 4 | Lake View..... | Trace | .010 | .60 | .230 | 2 000 | No | | | | |
| 5 | 14th Street | Trace | .006 | .60 | .150 | ..... | No | 547 | S | .01 | 41 |
| 5 | Chicago Avenue | Trace | .009 | .60 | .220 | 150 | No | | | | |
| 5 | Hyde Park..... | Trace | .006 | .60 | .180 | 2 000 | No | | | | |
| 5 | Lake View..... | Trace | .008 | .60 | .170 | 250 | No | | | | |
| 7 | 14th Street | Trace | .009 | .60 | .210 | 175 | No | 237 | W | Trace | 36 |
| 7 | Chicago Avenue | Trace | .011 | .60 | .240 | 175 | No | | | | |
| 7 | Hyde Park..... | Trace | .007 | .60 | .230 | 1 350 | No | | | | |
| 7 | Lake View..... | Trace | .012 | .60 | .220 | 40 250 | No | | | | |
| 8 | 14th Street | Trace | .008 | .60 | .170 | 5 500 | No | 227 | W | None | 38 |
| 8 | Chicago Avenue | Trace | .012 | .60 | .230 | 1 500 | No | | | | |
| 8 | Hyde Park..... | Trace | .008 | .60 | .190 | 900 | No | | | | |
| 8 | Lake View..... | Trace | .012 | .60 | .210 | 1 250 | No | | | | |
| 9 | 14th Street | Trace | .008 | .60 | .210 | 1 450 | No | 579 | W | None | 39 |
| 9 | Chicago Avenue | Trace | .011 | .60 | .250 | 160 | No | | | | |
| 9 | Hyde Park..... | Trace | .006 | .60 | .170 | 5 160 | No | | | | |
| 9 | Lake View..... | Trace | .012 | .60 | .220 | 550 | No | | | | |
| 10 | 14th Street | Trace | .005 | .60 | .240 | 320 | No | 479 | W | None | 43 |
| 10 | Chicago Avenue | Trace | .010 | .60 | .200 | 650 | No | | | | |
| 10 | Hyde Park..... | Trace | .005 | .60 | .160 | 4 050 | No | | | | |
| 10 | Lake View..... | Trace | .010 | .60 | .210 | 8 250 | No | | | | |
| 11 | 14th Street | Trace | .014 | .60 | .250 | 175 | No | 459 | Sw | None | 42 |
| 11 | Chicago Avenue | Trace | .014 | .60 | .290 | 175 | No | | | | |
| 11 | Hyde Park..... | Trace | .011 | .60 | .260 | 3 500 | No | | | | |
| 11 | Lake View..... | Trace | .013 | .60 | .220 | 1 800 | No | | | | |
| 12 | 14th Street | Trace | .007 | .65 | .190 | 55 | No | 486 | Sw | None | 49 |
| 12 | Chicago Avenue | Trace | .010 | .65 | .280 | 75 | No | | | | |
| 12 | Hyde Park..... | Trace | .007 | .65 | .200 | 100 | No | | | | |
| 12 | Lake View..... | Trace | .010 | .65 | .240 | 240 | No | | | | |
| 14 | 14th Street | Trace | .001 | .65 | .260 | 560 | No | 642 | E | Trace | 36 |
| 14 | Chicago Avenue | Trace | .010 | .65 | .280 | 220 | No | | | | |
| 14 | Hyde Park..... | Trace | .008 | .65 | .240 | 2 000 | No | | | | |
| 14 | Lake View..... | Trace | .011 | .65 | .270 | 500 | No | | | | |
| 15 | 14th Street | Trace | .010 | .65 | .220 | 1 250 | No | 363 | N | Trace | 34 |
| 15 | Chicago Avenue | Trace | .011 | .65 | .290 | 2 100 | No | | | | |
| 15 | Hyde Park..... | Trace | .008 | .65 | .210 | 5 750 | No | | | | |
| 15 | Lake View..... | Trace | .012 | .65 | .260 | 2 500 | No | | | | |

RESULTS OF DAILY EXAMINATIONS—*Continued.*

| DECEMBER. | SOURCE OF SAMPLES. PUMPING STATIONS. | Free Am- monia. | Albuminoid Ammonia. | Chlorine. | Oxygen cons. in 10 min. at 100° C. | Bacteria per cc. | Pathogenic Bacteria. | METEOROLOGIC DATA 24-HOUR PERIODS. | | | |
|-----------|---|--------------------|------------------------|-----------|--|---------------------|-------------------------|---------------------------------------|----------------|------------------------------|---------------|
| | | | | | | | | Wind move- ment. | Wind direc. | Precip- ita'n, inches. | Mean temp. |
| 16 | 14th Street | Trace | .007 | .65 | .180 | 400 | No | 296 | Se | None | 36 |
| 16 | Chicago Avenue | Trace | .007 | .65 | .190 | 2 500 | No | | | | |
| 16 | Hyde Park | Trace | .007 | .65 | .190 | 2 000 | No | | | | |
| 16 | Lake View | Trace | .007 | .65 | .210 | 100 | No | | | | |
| 17 | 14th Street | Trace | .006 | .65 | .180 | 2 500 | No | 424 | S | Trace | 36 |
| 17 | Chicago Avenue | Trace | .008 | .65 | .230 | 50 | No | | | | |
| 17 | Hyde Park | Trace | .006 | .65 | .200 | 40 000 | No | | | | |
| 17 | Lake View | Trace | .008 | .65 | .220 | 2 500 | No | | | | |
| 18 | 14th Street | Trace | .013 | .65 | .240 | 16 500 | No | 408 | Nw | Trace | 30 |
| 18 | Chicago Avenue | Trace | .016 | .65 | .260 | 25 000 | No | | | | |
| 18 | Hyde Park | Trace | .010 | .65 | .200 | 25 000 | No | | | | |
| 18 | Lake View | Trace | .010 | .65 | .240 | 2 000 | No | | | | |
| 19 | 14th Street | Trace | .011 | .65 | .190 | 2 000 | No | 268 | W | Trace | 24 |
| 19 | Chicago Avenue | Trace | .011 | .65 | .220 | 4 000 | No | | | | |
| 19 | Hyde Park | Trace | .006 | .65 | .200 | 2 500 | No | | | | |
| 19 | Lake View | Trace | .011 | .65 | .230 | 17 000 | No | | | | |
| 21 | 14th Street | Trace | .007 | .65 | .180 | 17 500 | No | 288 | Nw | None | 20 |
| 21 | Chicago Avenue | Trace | .007 | .65 | .200 | 13 000 | No | | | | |
| 21 | Hyde Park | Trace | .007 | .65 | .210 | 5 500 | No | | | | |
| 21 | Lake View | Trace | .008 | .65 | .240 | 17 500 | No | | | | |
| 22 | 14th Street | Trace | .007 | .65 | .180 | 18 500 | No | 377 | SNw | .01 | 27 |
| 22 | Chicago Avenue | Trace | .007 | .65 | .190 | 6 000 | No | | | | |
| 22 | Hyde Park | Trace | .007 | .65 | .240 | 9 000 | No | | | | |
| 22 | Lake View | Trace | .008 | .65 | .250 | 1 800 | No | | | | |
| 23 | 14th Street | Trace | .006 | .65 | .190 | 3 500 | No | 420 | Ne | .04 | 24 |
| 23 | Chicago Avenue | Trace | .007 | .65 | .180 | 3 600 | No | | | | |
| 23 | Hyde Park | Trace | .006 | .65 | .200 | 6 500 | No | | | | |
| 23 | Lake View | Trace | .006 | .65 | .180 | 14 000 | No | | | | |
| 24 | 14th Street | Trace | .008 | .65 | .190 | 1 500 | No | 271 | Nw | Trace | 21 |
| 24 | Chicago Avenue | Trace | .008 | .65 | .180 | 27 000 | No | | | | |
| 24 | Hyde Park | Trace | .009 | .65 | .220 | 4 500 | No | | | | |
| 24 | Lake View | Trace | .006 | .65 | .180 | 6 000 | No | | | | |
| 28 | 14th Street | Trace | .005 | .60 | .140 | 25 | No | 635 | S | Trace | 37 |
| 28 | Chicago Avenue | Trace | .006 | .60 | .180 | 100 | No | | | | |
| 28 | Hyde Park | Trace | .007 | .60 | .180 | 600 | No | | | | |
| 28 | Lake View | Trace | .005 | .60 | .150 | 480 | No | | | | |
| 29 | 14th Street | Trace | .005 | .60 | .140 | 5 000 | No | 376 | Sw | Trace | 40 |
| 29 | Chicago Avenue | Trace | .007 | .60 | .160 | 31 000 | No | | | | |
| 29 | Hyde Park | Trace | .007 | .60 | .180 | 4 800 | No | | | | |
| 29 | Lake View | Trace | .008 | .60 | .150 | 800 | No | | | | |
| 30 | 14th Street | Trace | .006 | .60 | .160 | 220 | No | 313 | Sw | Trace | 44 |
| 30 | Chicago Avenue | Trace | .004 | .60 | .170 | 3 500 | No | | | | |
| 30 | Hyde Park | Trace | .005 | .60 | .150 | 8 500 | No | | | | |
| 30 | Lake View | Trace | .008 | .60 | .170 | 4 500 | No | | | | |
| 31 | 14th Street | Trace | .004 | .60 | .150 | 1 100 | No | 340 | Se | None | 46 |
| 31 | Chicago Avenue | Trace | .007 | .60 | .200 | 10 000 | No | | | | |
| 31 | Hyde Park | Trace | .005 | .60 | .150 | 2 000 | No | | | | |
| 31 | Lake View | Trace | .005 | .60 | .170 | 1 200 | No | | | | |

MONTHLY AVERAGE RESULTS OF WATER EXAMINATION: 1896.

| MONTHS. | SOURCE OF SUPPLY. PUMPING STATIONS. | Free Ammonia. | Albuminoid Ammonia. | Chlorides. | Oxygen consumed in 10 minutes at 100° C. | Daily average number of Bacteria per cc. | Per cent. of times Path. Bact. were present. | METEOROLOGIC CONDITIONS. | | | |
|--|---|---------------|------------------------|------------|--|--|--|------------------------------|--------------------------|---------------------------|------------------------|
| | | | | | | | | Total wind move- ment. | Prevailing direction. | Precipita- tion (ins.) | Mean tem- perature. |
| January .. | 14th Street.. | .00450 | .01080 | .72 | .191 | 4 692 | None | 11 771 | S 21 | 1.12 | 27 |
| | Chicago Ave | .00846 | .01500 | .73 | .191 | 1 773 | 3.87 | | | | |
| | Hyde Park.. | .00519 | .01000 | .72 | .188 | 2 239 | None | | | | |
| | Lake View.. | .00530 | .01000 | .74 | .191 | 2 256 | None | | | | |
| February . | 14th Street.. | .00201 | .00865 | .65 | .160 | 7 130 | None | 13 824 | W 31 | 3.48 | 27 |
| | Chicago Ave | .00178 | .00882 | .66 | .225 | 2 269 | None | | | | |
| | Hyde Park.. | .00195 | .01073 | .66 | .173 | 1 655 | 8.60 | | | | |
| | Lake View.. | .00186 | .00582 | .67 | .186 | 2 394 | 8.60 | | | | |
| March | 14th Street.. | .00073 | .00048 | .63 | .142 | 1 831 | None | 13 725 | N 23 | 1.26 | 31 |
| | Chicago Ave | .00042 | .00058 | .68 | .163 | 4 283 | 3.87 | | | | |
| | Hyde Park.. | .00073 | .00051 | .58 | .153 | 2 845 | 7.65 | | | | |
| | Lake View.. | .00096 | .00041 | .65 | .153 | 2 703 | 7.65 | | | | |
| April | 14th Street.. | .00930 | .00934 | .63 | .138 | 6 671 | 7.65 | 14 265 | S 30 | 2.79 | 53 |
| | Chicago Ave | .00643 | .00904 | .65 | .132 | 7 992 | 7.75 | | | | |
| | Hyde Park.. | .00473 | .00640 | .70 | .132 | 4 182 | None | | | | |
| | Lake View.. | .00627 | .01057 | .66 | .115 | 6 028 | 3.87 | | | | |
| May | 14th Street.. | .00176 | .00588 | .60 | .134 | 7 590 | 4.00 | 13 729 | S 23 | 4.16 | 66 |
| | Chicago Ave | .00080 | .00752 | .61 | .154 | 5 080 | 8.00 | | | | |
| | Hyde Park.. | .00120 | .00424 | .59 | .125 | 5 310 | 16.00 | | | | |
| | Lake View.. | .00144 | .00836 | .60 | .172 | 5 504 | 12.00 | | | | |
| June | 14th Street.. | .00065 | .00561 | .61 | .147 | 6 251 | None | 10 228 | Ne 28 | 2.82 | 67 |
| | Chicago Ave | .00061 | .00560 | .60 | .147 | 11 232 | 11.5 | | | | |
| | Hyde Park.. | .00046 | .00600 | .60 | .140 | 11 297 | None | | | | |
| | Lake View | .00073 | .00830 | .63 | .147 | 13 246 | None | | | | |
| July | 14th Street.. | .00030 | .00538 | .63 | .156 | 9 577 | 7.69 | 11 065 | Ne 30 | 3.61 | 72 |
| | Chicago Ave | .00034 | .00634 | .63 | .161 | 14 156 | 15.38 | | | | |
| | Hyde Park.. | .00038 | .00392 | .62 | .149 | 11 836 | 7.69 | | | | |
| | Lake View.. | .00042 | .00803 | .64 | .213 | 12 697 | 11.48 | | | | |
| August | 14th Street.. | .00069 | .00411 | .61 | .144 | 7 372 | 19.23 | 10 489 | S 19 | 3.52 | 73 |
| | Chicago Ave | .00038 | .00346 | .60 | .140 | 7 289 | 15.38 | | | | |
| | Hyde Park.. | .00038 | .00300 | .60 | .138 | 7 617 | 19.23 | | | | |
| | Lake View.. | .00065 | .00607 | .61 | .200 | 8 025 | 15.38 | | | | |
| September | 14th Street.. | .00092 | .00792 | .60 | .158 | 7 121 | 12.00 | 11 378 | Ne 20 | 3.54 | 61 |
| | Chicago Ave | .00092 | .00730 | .60 | .166 | 9 674 | 16.00 | | | | |
| | Hyde Park.. | .00092 | .00830 | .60 | .151 | 9 171 | 20.00 | | | | |
| | Lake View.. | .00108 | .01292 | .61 | .226 | 14 943 | 24.00 | | | | |
| October | 14th Street.. | .00085 | .01172 | .60 | .162 | 6 332 | None | 12 306 | S 21 | 1.33 | 50 |
| | Chicago Ave | .00081 | .01151 | .60 | .179 | 8 926 | 4.0 | | | | |
| | Hyde Park.. | .00085 | .01140 | .60 | .179 | 6 016 | 4.0 | | | | |
| | Lake View.. | .00085 | .01247 | .60 | .201 | 11 733 | None | | | | |
| November | 14th Street.. | .00022 | .00922 | .60 | .165 | 2 231 | None | 14 050 | W 31 | 2.16 | 38 |
| | Chicago Ave | .00060 | .01143 | .60 | .187 | 5 974 | None | | | | |
| | Hyke Park.. | .00048 | .00965 | .60 | .172 | 3 690 | None | | | | |
| | Lake View.. | .00039 | .01391 | .60 | .192 | 5 400 | None | | | | |
| December. | 14th Street.. | .00025 | .00552 | .62 | .190 | 3 295 | None | 11 904 | W 22 | .16 | 33 |
| | Chicago Ave | .00012 | .00418 | .62 | .223 | 5 442 | None | | | | |
| | Hyde Park.. | .00028 | .00640 | .62 | .198 | 6 322 | None | | | | |
| | Lake View.. | .00004 | .00888 | .62 | .214 | 5 202 | None | | | | |
| Yearly average for each Station. | 14th Street.. | .00185 | .00701 | .625 | .157 | 3 841 | 4.21 | | | | |
| | Chicago Ave | .00181 | .00765 | .631 | .172 | 7 008 | 7.14 | | | | |
| | Hyde Park.. | .00146 | .00671 | .633 | .158 | 6 015 | 6.93 | | | | |
| | Lake View.. | .00151 | .00881 | .636 | .184 | 7 511 | 6.92 | | | | |
| Yearly average of all analyses. { | | .00165 | .00754 | .631 | .167 | 6 093 | 6.30 | | | | |

SANITARY INSPECTION AND ANALYSIS OF ICE.

BY CASS L. KENNICOTT, F. C. S., CITY CHEMIST.

DURING the past two years, the City Council, recognizing the dangerous properties of impure ice, has passed ordinances prohibiting the storing or sale of such ice and providing for their enforcement through the DEPARTMENT OF HEALTH.

The sources of the contamination of ice, other than the original contamination of the water from which it is cut, are many. In the first place, the hay, straw or sawdust, covering the pile of ice blocks in the ice house, may be a source of infection. The cars in which ice is transported are often filthy, having been used to carry manure, brewery slop, etc. After the arrival of the ice in the city, the wagons that convey it to the consumer are, as a rule, in a very unsanitary condition. The men in charge of them do not hesitate to walk in the wagons with muddy boots, and grasping a piece of ice with a pair of tongs, slide it across the sidewalk, which may be covered with the sputa of beings suffering from various diseases, and then proceed to wash it with water from the same bucket from which the horses are watered. Unlike other foods, ice cannot be boiled or cooked and cannot even be thoroughly washed, it being of porous nature.

Artificial ice may be subject to the same chances of infection except contamination by sewage, for there is no excuse for any manufacturer making ice from polluted water. A greater part of the artificial ice is frozen from distilled water. The distilled water generally used, or at least a part of it, is condensed from the engines and, therefore, contains a trace of cylinder oil. On this account, after being distilled

and reboiled, it is passed through a charcoal filter. This is objectionable, for a charcoal filter once infected would become a breeding place for bacteria and thus pollute instead of cleanse all water which subsequently passed through it. If it were not for removing oil there would be no necessity for using filters for water already distilled. Many consumers of artificial ice complain that it melts faster than natural ice, but there is little ground for this complaint, the difference in the rate of melting being very slight. This slight difference in the rate of melting is probably due to one or more of three causes; a low specific heat, a difference in temperature, or some difference in physical structure. Probably the latter, as tests of temperature showed differences so slight as to fall within the limits of error of experiment. A difference in specific heat, if such a thing is possible, would not of necessity change the *rate* of melting, although the amount of heat absorbed would be less.

Natural ice is frozen from one direction. Artificial ice is frozen from five directions, viz., the sides, end and bottom of the can. As water freezes, it expands and each successive layer of ice must become subject to stress in forcing itself into position as the block forms. To quote Professor J. THOMPSON (Proc. Roy. Soc., Dec., 1861), "Any stress whatever tending to change the form of ice must impart to the ice a tendency to melt away." This would seem to be an explanation of the more rapid melting of artificial ice. In my own experiments I find that the difference in rate of melting is so small that it is difficult to measure, even by delicate scientific methods.

Samples of ice intended for analysis in the laboratory are collected in square galvanized iron cans, holding a cubic foot; each can is half filled with distilled water to be used in washing the sample when it is collected. The can and distilled water are then sterilized by steam. Upon delivery of

the sample at the laboratory a sample for the bacteriologic analysis is at once taken. The cake of ice is so placed that a vertical section of the ice sheet is uppermost. This surface is washed with sterile water and the surface chipped away in a thin layer by using a small sharp ice-pick. The ice-pick is first sterilized by heating directly in the flame of a Bunsen burner. These chips are thrown away and a second layer is broken away by shaving the ice into small pieces. These chips are placed in a wide-mouth glass-stoppered bottle that has been sterilized by steam. A pair of forceps is used to transfer the pieces of ice to the sterile bottle. The forceps are also sterilized by heating in the Bunsen-burner flame. The water collecting in the bottle is planted upon culture media before the ice has entirely melted. The numerical count is made in the usual way in Petri saucers, while the determination of pathogenic bacteria is made by Parietti's method. A half cubic centimeter of the ice water is also added to 10 cubic centimeters of plain bouillon and incubated for two days; one-half cubic centimeter is then injected intraperitoneally in a guinea pig.

A sample for chemical analysis is taken, about five kilogrammes in weight, in the form of a cylinder, cutting from top to bottom of the cake, this method having been found to give the best average sample. The cylinder of ice is now washed with distilled water and placed in a percolator or museum jar to melt. The analysis should be commenced as soon as possible after the sample is melted, because changes from nitrites to nitrates or albuminoid to free ammonia take place much more rapidly in melted ice, after the water has become warm, than in waters. The organisms producing the changes seem to be more active after hybernation.

The interpretation of an ice analysis is even more difficult than that of a water analysis, if that be possible. Ice in its journey from the ice pond to the ice chest of the consumer

is subject to peculiar conditions in regard to source of supply and particularly to methods of packing and handling. It is necessary after ice is packed in the ice house to cover the pile of ice blocks with some material which will keep away air currents and, at the same time, be a poor conductor of heat. Saw-dust is objectionable, because when ice melts particles sink into the block. Straw is apt to give a yellow color to the ice. Clean hay is undoubtedly best, but often musty hay discarded as unfit food for cattle is used because it is cheap. There is no excuse for unclean ice wagons. It would seem that a wagon lined with sheet iron which could be easily washed would have preference over soggy wood which had absorbed contamination ever since it had been in use and may have become a breeding-ground for bacteria.

The opinion as to the sanitary quality of an ice sample must, as in a water analysis, be drawn from all available data taken as a whole. The limits of the ammonias will, if anything, be made more stringent for ice than for water. Ice containing nitrates is undoubtedly of a suspicious quality and should not be used in contact with articles of food and drink. There is generally but little more than a trace of chlorine in ice, say but one or two tenths per 100,000 parts. The oxygen consumed seems to be quite constant in pure ice and is of more value than in a water analysis, pure ice seldom giving more than one tenth part per 100,000 of oxygen consumed.

Artificial ice occupies the same position in regard to natural ice that artesian water bears to other waters, that is, so far as free ammonia is concerned. Free ammonia absorbed in small amounts from the air of the freezing room of the ice factory may appear as a large amount when measured by delicate chemical means and expressed in the figures of a water analysis. Upon this alone artificial ice should certainly not be condemned, although if the albuminoid ammonia is high organic contamination is probably present.

Natural ice should be cut from an unpolluted source, artificial ice be frozen from pure water. Ice should be stored and handled as carefully as any other food, transported in special cars used for no other purpose, and carried to the consumer in wagons carefully cleaned before each loading. The common practice seen in any city of the dropping of ice upon the streets or sidewalks is to be condemned. That this practice is highly objectionable need not be said. Each wagon could carry a frame of boards or a tray of sheet iron upon which to drop the ice and not allow it to absorb the filth of our city streets.

Ice inspection by the Laboratory consists, first, in an enforcement of the license regulation; second, the inspection of localities and analysis of samples of water from places where dealers wish to harvest ice; third, the analysis of samples collected by inspectors from ice wagons; and fourth, the supervision of impure ice to see that it is not sold for domestic use. Five inspectors have been employed in this work. It has been found that dealers appreciate suggestions from the DEPARTMENT and desire to harvest such ice as will be satisfactory upon inspection. The list of analyses tabulated is of waters from the more important sources of the ice supply. The ice from some of these places must be condemned as unfit for domestic use.

ANALYSES OF SAMPLES OF WATER FROM SOURCES OF ICE SUPPLY.

| SOURCE OF SAMPLE. | Total Solids. | Loss on Ignition. | Non-Volatile, Mineral Solids. | Free Ammonia. | Albuminoid Ammonia. | Nitrogen as Nitrates. | Nitrogen as Nitrates. | Total Nitrogen. | Chlorine. | Oxygen consum- ed in 10 min. at 100° C. | Growth in .15% Carbolic Bouillon. | Pathogenic Bac- teria Found. | Sanitary Condi- tion of Source. | Sanitary Quality. |
|---------------------------------------|---------------|-------------------|----------------------------------|---------------|------------------------|--------------------------|--------------------------|-----------------|-----------|---|---|---------------------------------|------------------------------------|----------------------|
| Camp Lake, Wis..... | 25.64 | 11.88 | 14.76 | .074 | .116 | No | No | .2563 | .750 | 1.200 | No | No | Fair | Bad |
| Calumet Lake, Ill..... | 21.09 | 12.11 | 8.98 | .116 | .320 | Yes | Trace | .437 | .800 | 2.030 | Yes | Yes | Bad | Bad |
| Cedar Lake, Ind..... | ..... | ..... | ..... | .010 | .130 | No | No | .1920 | .80 | 1.01 | Yes | No | Good | Usable |
| Cedar Lake, Ind..... | ..... | ..... | ..... | .002 | .140 | No | No | .1136 | .75 | 1.10 | Yes | No | Good | Usable |
| Cedar Lake, Ind..... | ..... | ..... | ..... | .010 | .150 | No | No | .1280 | .70 | 1.15 | Yes | No | Good | Usable |
| Cedar Lake, Ind..... | ..... | ..... | ..... | .008 | .146 | No | No | .1184 | .80 | 1.06 | Yes | No | Good | Usable |
| Clear Lake, Ind..... | 12.66 | 6.14 | 6.52 | .030 | .074 | No | No | .0832 | 2.75 | .740 | Yes | No | ..... | Suspicious |
| Clear Lake, Ind..... | 11.76 | 7.16 | 4.60 | .032 | .084 | No | No | .0928 | 2.80 | .930 | Yes | No | ..... | Suspicious |
| Cross Lake..... | 14.03 | 6.90 | 7.16 | .048 | .036 | No | No | .0672 | .70 | .86 | No | No | Fair | Usable |
| Diamond Lake..... | 24.00 | 11.56 | 12.44 | .060 | .120 | No | No | .1440 | 1.00 | 1.43 | No | No | Fair | Usable |
| Fox River, at Aurora..... | 32.10 | 12.76 | 19.34 | .048 | .066 | Trace | Trace | .0912 | 1.30 | .63 | Yes | Yes | Bad | Bad |
| Fox River, at Aurora..... | 34.68 | 14.22 | 20.46 | .070 | .078 | Trace | Trace | .1184 | 1.20 | .63 | Yes | Yes | Bad | Bad |
| Fox River, at Aurora..... | 34.86 | 11.90 | 22.96 | .040 | .070 | Trace | Trace | .0880 | 1.10 | .58 | Yes | Yes | Bad | Bad |
| Fox River, at Aurora..... | 32.98 | 13.28 | 19.70 | .034 | .070 | Trace | Trace | .0832 | 1.10 | .78 | Yes | Yes | Bad | Bad |
| Fox River, at Carpenterville..... | 30.48 | 8.42 | 22.06 | .010 | .026 | Trace | Trace | .0288 | .70 | ..... | No | No | Fair | Usable |
| Fox River, at Carpenterville..... | 26.60 | 8.24 | 18.36 | .010 | .024 | Trace | Trace | .0288 | .75 | ..... | No | No | Fair | Usable |
| Fox River, at Dundee, above town..... | 25.96 | 10.76 | 15.20 | .008 | .030 | Trace | Trace | .0304 | .70 | 8.19 | No | No | Fair | Usable |
| Fox River, at Dundee, below town..... | 26.88 | 9.20 | 17.68 | .086 | .064 | Trace | Trace | .1200 | .70 | .792 | Yes | Yes | Bad | Bad |
| Fox River, at Elgin..... | 35.26 | 13.34 | 21.92 | .012 | .012 | Trace | Trace | .2016 | .90 | .66 | Yes | Yes | Bad | Bad |
| Fox River, at Elgin..... | 33.20 | 12.16 | 27.04 | .012 | .090 | Trace | Trace | .0816 | .90 | .68 | Yes | Yes | Bad | Bad |
| Fox River, at Elgin..... | 35.02 | 13.12 | 21.90 | .020 | .100 | Trace | Trace | .0960 | .90 | .64 | Yes | Yes | Bad | Bad |
| Fox River, at Elgin..... | 35.02 | 13.12 | 21.90 | .020 | .100 | Trace | Trace | .0960 | .90 | .64 | Yes | Yes | Bad | Bad |
| Fox River, at Elgin..... | 36.46 | 14.56 | 23.30 | .010 | .096 | Trace | Trace | .0848 | .85 | .70 | Yes | Yes | Bad | Bad |
| Fox River, at Oswego..... | 34.00 | 13.80 | 20.02 | .074 | .128 | Trace | Trace | .1616 | .85 | .625 | Yes | Yes | Bad | Bad |
| Fox River, at Oswego..... | 32.88 | 13.86 | 19.02 | .090 | .132 | Trace | Trace | .1776 | .90 | .730 | Yes | Yes | Bad | Bad |
| Fox River, at Yorkville..... | 37.02 | 16.60 | 20.42 | .054 | .146 | Trace | Trace | .1600 | 1.05 | .80 | Yes | Yes | Bad | Bad |
| Fox River, at Yorkville..... | 34.60 | 15.60 | 19.00 | .100 | .144 | Trace | Trace | .1152 | 1.05 | .72 | Yes | Yes | Bad | Bad |
| Hooker Lake, Wis..... | 27.90 | 10.30 | 16.60 | .066 | .098 | Trace | Trace | .1350 | 1.10 | .851 | No | No | Fair | Bad |
| Hooker Lake, Wis..... | 27.70 | 10.10 | 17.60 | .078 | .099 | Trace | Trace | .1457 | 1.10 | .211 | No | No | Fair | Bad |
| Hooker Lake, Wis..... | 14.94 | 4.98 | 9.96 | .046 | .040 | Trace | Trace | .0848 | .50 | ..... | No | No | Good | Good |
| Hudson Lake, Ind..... | 12.28 | 5.44 | 6.84 | .032 | .044 | Trace | Trace | .0608 | .50 | ..... | No | No | Good | Good |
| Hudson Lake, Ind..... | 12.28 | 5.44 | 6.84 | .032 | .044 | Trace | Trace | .0608 | .50 | ..... | No | No | Good | Good |
| Kankakee River, at Center Park..... | 32.04 | 11.16 | 20.88 | .040 | .030 | Trace | Trace | .0560 | 1.00 | .93 | No | No | Fair | Suspicious |

SOURCE OF SAMPLE.

| SOURCE OF SAMPLE. | Total Solids. | Loss on Ignition. | Non-Volatile Mineral Solids. | Free Ammonia. | Albuminoid Ammonia. | Nitrogen as Nitrates. | Nitrogen as Nitrites. | Total Nitrogen. | Chlorine. | Oxygen consumed in 10 min. at 100° C. | Growth in 15% Carbolic Bouillon. | Pathogenic Bacteria Found. | Sanitary Condition of Source. | Sanitary Quality. |
|--|---------------|-------------------|------------------------------|---------------|---------------------|-----------------------|-----------------------|-----------------|-----------|---------------------------------------|----------------------------------|----------------------------|-------------------------------|-------------------|
| Kankakee River, at Center Park..... | 34.62 | 12.56 | 22.06 | .034 | .076 | Trace | No | .0880 | .90 | .82 | No | No | Fair | Suspicious |
| Kankakee River, at Center Park..... | 33.50 | 11.44 | 22.06 | .020 | .070 | Trace | No | .0720 | 1.00 | .70 | No | No | Fair | Suspicious |
| Kankakee River, at Center Park..... | 33.80 | 10.50 | 23.30 | .034 | .076 | Trace | No | .0880 | .95 | .95 | No | No | Fair | Suspicious |
| Loon Lake..... | 21.58 | 11.60 | 10.42 | .008 | .048 | No | No | .0448 | .65 | .85 | No | No | Good | Good |
| Loon Lake..... | 18.08 | 9.48 | 9.48 | .034 | .054 | No | No | .0448 | .80 | .94 | No | No | Good | Good |
| Manona Lake, Wis..... | 18.50 | 6.07 | 11.8 | .0009 | .045 | No | No | .0367 | .60 | ..... | No | No | Good | Good |
| Manona Lake, Wis..... | 21.65 | 10.50 | 11.16 | .0009 | .075 | No | No | .0367 | .60 | ..... | No | No | Good | Good |
| Mendota Lake, Wis..... | 19.20 | 7.6 | 11.6 | .001 | .060 | No | No | .0488 | .60 | ..... | No | No | Good | Good |
| Mendota Lake, Wis..... | 19.40 | 8.0 | 11.4 | .001 | .058 | No | No | .0472 | .60 | ..... | No | No | Good | Good |
| Mills Lake, Wis..... | ..... | ..... | ..... | .002 | .078 | No | No | .0656 | ..... | ..... | No | No | Good | Good |
| Mills Lake, Wis..... | ..... | ..... | ..... | .002 | .080 | No | No | .0652 | ..... | ..... | No | No | Good | Good |
| Montgomery Lake, Wis..... | 26.80 | 10.40 | 16.40 | .060 | .118 | No | No | .1465 | .65 | 1.392 | No | No | Fair | Bad |
| Pond, Forty-third and Robey streets..... | 12.74 | 2.44 | 10.30 | .046 | .032 | ..... | ..... | .0624 | .80 | ..... | Yes | Yes | Bad | Bad |
| Pond, Forty-third and Robey streets..... | 14.40 | 3.24 | 11.16 | .058 | .036 | ..... | ..... | .0752 | .85 | ..... | Yes | Yes | Bad | Bad |
| Pond, Eighty-second street and Railroad ave..... | 45.72 | 10.72 | 35.00 | .026 | .046 | No | No | .0576 | 2.70 | .66 | No | No | Bad | Suspicious |
| Pond, Peterson and Robey streets..... | 33.05 | 11.05 | 22.00 | .020 | .240 | No | No | .3520 | 2.30 | 1.64 | Yes | Yes | Bad | Bad |
| Rock Lake..... | 13.56 | 5.72 | 7.84 | .006 | .036 | No | No | .0336 | .75 | 1.01 | No | No | Fair | Usable |
| Rockland Lake..... | 12.70 | 5.34 | 7.36 | .006 | .046 | No | No | .1168 | .60 | .510 | No | No | Fair | Usable |
| Rockland Lake..... | 14.06 | 5.60 | 8.46 | .110 | .044 | No | No | .1232 | .60 | .509 | No | No | Fair | Usable |
| Silver Lake, Wis..... | 10.40 | 6.08 | 4.52 | .032 | .036 | No | No | .0544 | .50 | ..... | No | No | Fair | Usable |
| Stone Hotel, 92d street and Stony Island avenue..... | 33.62 | 6.70 | 26.92 | .034 | .036 | No | No | .0560 | 1.00 | ..... | No | No | Fair | Usable |
| Stone Lake, Ind..... | 8.04 | 3.94 | 4.10 | .018 | .046 | No | No | .0512 | .60 | .69 | Yes | Yes | Fair | Usable |
| Stone Lake, Ind..... | 8.40 | 3.78 | 4.62 | .016 | .054 | No | No | .0560 | .60 | ..... | Yes | Yes | Fair | Usable |
| Taylor Lake, Ind..... | 18.70 | 8.10 | 10.60 | .076 | .160 | No | No | .1888 | .75 | 1.27 | Yes | Yes | Fair | Suspicious |
| Taylor Lake, Ind..... | 18.64 | 7.42 | 11.22 | .078 | .160 | No | No | .1904 | .75 | 1.27 | Yes | Yes | Fair | Suspicious |
| Twin Lakes, Wis..... | 13.80 | 5.64 | 8.16 | .072 | .078 | No | No | .1200 | .075 | ..... | No | No | Good | Usable |
| Twin Lakes, Wis..... | 10.12 | 2.96 | 7.16 | .076 | .070 | No | No | .1168 | .075 | ..... | No | No | Good | Usable |
| Waubesa Lake, Wis..... | ..... | ..... | ..... | .002 | .034 | No | No | .0288 | ..... | ..... | No | No | Good | Usable |
| Waubesa Lake, Wis..... | ..... | ..... | ..... | .002 | .045 | No | No | .0376 | ..... | ..... | No | No | Good | Usable |
| Wolf Lake, Ind..... | 18.32 | 4.70 | 13.62 | .042 | .032 | Trace | No | .0751 | .065 | 1.916 | Yes | Yes | Bad | Bad |

DIAGNOSIS OF TYPHOID FEVER BY THE BLOOD TEST.

F. ELBRIDGE WYNEKOOP, B. S., M. D., ASSISTANT BACTERIOLOGIST.

THE diagnosis of typhoid fever was introduced into the work of the laboratory during November, 1896. It was undertaken because the test seemed to offer an exact means of verifying diagnoses and also because of the difficulties that the general practitioner would meet in applying it himself. The chief obstacle is in the difficulty of maintaining growing cultures of *bacillus typhosus* and having them in the right condition to get good results with the method. Thus far 112 examinations of blood specimens from suspected cases and others not having typhoid fever have been made, and so far as can be ascertained the work has been well received by physicians.

The courtesy of practitioners in returning reports regarding the subsequent clinical course of the cases under consideration has been greatly appreciated, and has made it possible to arrive at some definite conclusions as to the value of the laboratory tests.

It was during the latter part of the year 1896 that this new and seemingly very valuable method of diagnosis of typhoid fever was given to the medical profession. To WIDAL, PFEIFFER, SICARD and other Continental investigators credit is due for the discovery of bacteriologic methods whereby this disease may be diagnosed with an accuracy which compares not unfavorably with that obtained in tuberculosis and diphtheria. It has been shown by PFEIFFER that

the blood serum of typhoid patients contains a *specific antagonistic substance* which, when brought in contact with the motile typhoid organisms, arrests the active movements, and causes them to collect in groups or undergo a process known as agglutination. Observing that the blood of healthy individuals and persons suffering with other diseases failed to produce such phenomena, WIDAL proposed to use this reaction as a clinical test for typhoid fever.

The test, as at first outlined, was not destined to come into general use because of the difficulty of its application. It necessitated the collection of a small amount of blood in a test tube and its careful transportation to a laboratory where, upon coagulation, the serum was separated and mixed with a bit of bouillon culture of EBERTH'S bacillus. The whole was then placed in an incubator, and after several hours there appeared a "flocculent precipitate composed of immobilized and agglutinated bacilli" which, upon settling, left the upper part of the fluid clear. Dr. WYATT JOHNSTON, of Montreal, changed and greatly simplified the method by suggesting the use of dried blood. This brought the test within the range of municipal laboratory work, and rendered the discovery easy of application. A drop of blood dried on a piece of mica or cover-slip can be carried any distance with ease and safety, and when put in solution reacts with typhoid bacilli in a very satisfactory manner, being sufficient in most cases for a positive diagnosis.

The methods employed are essentially as follows :

Outfit.—In order to facilitate matters and encourage the sending of specimens of blood from suspected cases of typhoid to the laboratory, suitable outfits are provided and placed in numerous drug stores throughout the city, thus being easily obtained by practitioners. The make-up is simple. In an envelope is placed a bit of sterilized mica wrapped in sterilized paper, a history sheet with directions

for taking the sample, and an envelope for the return of the outfit, which usually comes by mail. The use of the mica was introduced by us, as it is found to give better satisfaction than either paper or cover-slips. There is little liability of it breaking, and because of its smooth, impenetrable surface it is a good substance on which to dissolve the blood.

The Specimen of Blood.—The blood may be obtained by pricking the finger with a sterile needle. In doing this, it is advisable, after cleansing the part with alcohol or ether and allowing the hand to drop to the side a moment for the better filling of the veins, to apply a small elastic about the finger, beginning at the base and ending near the tip. Then a gentle puncture of the skin, which is nearly painless, brings forth sufficient blood, so that a large drop or more may be collected on the mica, the whole operation not requiring more than two minutes. Upon removing the elastic it is well to again wash the finger tip in alcohol. After the blood has dried, without the aid of heat, the mica is replaced in the same paper, and, together with the history blank properly filled out, it is sent to the laboratory.

Preparation of the Slide.—The best way to examine living typhoid organisms, and to note the action of blood solutions upon them, is in what is called the “hanging drop.” For this, a hollow-ground slide is necessary, which has drawn about the concavity at its center a ring of solid vaselin. In making the drop for the test, there is placed in the center of a clean cover-glass, by the aid of the platinum loop, a drop of a bouillon culture of typhoid bacillus, to which is added a loopful of the solution of dried blood. These are stirred together and the cover-glass inverted upon the slide in such a manner that the drop of fluid is suspended in the concavity, the vaselin holding the cover-slip in place and preventing evaporation of the drop.

The blood solution is obtained by adding a large drop of water to the dried blood, which is dissolved upon slight agitation. Instead of making a solution of the whole blood by stirring, Dr. JOHNSTON places a drop of water "on the film of dried blood and allows it to stand for a minute or two." Then "a loopful of the solution so obtained is taken *from the top of the drop* and mixed with a loopful of the bouillon culture." This is, perhaps, the better way of making a solution, in that it insures a clean preparation, containing very little fibrin; yet equally good results are secured when the sample is dissolved by stirring, providing there is sufficient dilution so that a viscid fluid is not produced. Such a solution is to be avoided, as its consistency alone is liable to lessen the motility of the bacilli and cause a condition simulating a partial reaction. The presence of a few blood-cells in the hanging drop is rather an advantage, in that they assist in focusing at the time of examination.

Instead of using water in making a solution of the blood, a drop of typhoid bouillon itself may be employed. Hanging drops were made in this manner and the reaction obtained seemed to be entirely satisfactory.

Control slides are usually made, to be examined side by side with the one for diagnosis. The first of these is a drop of pure bouillon culture of the typhoid organisms, and the other is a drop of the same culture, but mixed with a solution of normal blood.

The Diagnosis.—For the microscopical examination either a dry objective (No. 7 Leitz) or an oil-immersion lens may be used. The dry objective is to be preferred in that it is amply sufficient for the observation, and at the same time permits of a more extended view of the field. In the hanging drop of the control slides the bacilli are seen pretty evenly placed throughout the field and in active motion, swimming and darting in all directions, providing the culture has not

been transplanted at too great an interval. When the reaction is obtained the drop containing a solution of the typhoid blood exhibits a very different appearance. Within a few minutes the activity of the organisms becomes less and they seem to be moving as though some substance was destroying their vitality. Very soon a few succumb, others almost lifeless move against them and can go no further. More and more meet the same fate, and in a little while all have gathered together in groups. Agglutination is complete. The field is motionless, and great irregular masses of seemingly lifeless bacteria are everywhere seen, with only here and there a single individual.

But this is not all. There is more to a reaction than "arrested motion" and "agglutination;" there is a third element which is frequently witnessed, and is known as "disintegration." Dr. JOHNSTON has called attention to this peculiar phenomenon, concerning which he says: "The clumped bacteria, if watched for an hour or so, may be seen to break up into granules, which gradually become indistinct and vanish whilst under observation, until practically no trace remains of the clumps, which shortly before studded the entire field of the microscope." The change does not occur in every sample of typhoid blood, and is said to be not well marked in very dilute blood solutions. All reactions do not present such typical phenomena. There are variations in degree, running from the slight to the decidedly pronounced, depending upon the stage of the disease, and, it may be, in a limited number of cases, upon personal peculiarities.

The relative proportion of the specific substances producing a reaction is not constant, but varies with the cases. One blood may contain a large amount of the paralyzing substance and little of the agglutinative; another may contain them in opposite ratio, and a third may hold equal amounts of all the substances concerned in a reaction. It is observed,

however, that in a good number of cases only those are present which have to do with arrested motion and agglutination, the bactericidal material being apparently absent, and as a result disintegration does not take place.

In a few instances reactions were obtained by using normal blood and also blood from diseased conditions not typhoid. These are known as pseudo-reactions, and were not observed until blood solutions were used in the place of serum. It is thought they are due to the fact that a solution of the whole blood of even healthy persons contains small amounts of material capable of acting on very sensitive bacteria, such as are present in active virulent cultures obtained by transplanting daily at 37° C. Reactions of this kind can be avoided by using attenuated cultures. Dr. JOHNSTON advises the use of "quiescent stock cultures, grown at room temperature and transplanted at intervals of about one month. From such stock cultures a twenty-four-hour bouillon, at 37° C., with a moderately diluted solution or serum will give prompt and decisive reactions within a few minutes in the case of typhoid patients, while concentrated solutions of non-typhoid blood or serum will give no reaction even at the end of twenty-four to forty-eight hours."

In order to insure a satisfactory diagnosis in every case considerable attention must be given the culture of the typhoid organisms. It is found that the bacilli are preserved best on agar, transplanted at infrequent intervals and grown at room temperature. From the agar growth a bouillon culture is made and, after standing twenty-four hours, is ready for making the test. A suitable degree of sensitiveness is obtained together with the required activity. Cultures which have grown longer than twenty-four hours contain sediment and the bacteria have a tendency to spontaneous grouping rendering the culture unfit for use.

The reaction is usually complete within twenty to thirty minutes after the preparation of the hanging drop, and in many cases a diagnosis can be made at that time, but it is advisable to delay final judgment some hours. It is observed in undoubted typhoid that the reaction is progressive. All the elements entering into it become more pronounced with time, and *no multiplication or increase in numbers* of the typhoid bacilli takes place. This seems to be quite an important diagnostic feature. In cases not typhoid and in pseudo-reactions the clumps are inclined to break up and the organisms undergo rapid multiplication, so that in a few hours the bacteria have increased in the hanging drop many times.

In the laboratory the slides are prepared in the morning and a probable diagnosis telephoned to the physician within an hour, but the positive diagnosis is not made and the written report sent, until in the afternoon. During the interval of six or seven hours an opportunity is given for the multiplication of the bacteria, which rapidly takes place, providing the blood solution does not contain antagonistic substances. APPEL and THORNBURY advise putting the preparations aside for twenty-four hours. They also call attention to the fact that agglutination occurs *more quickly* in pseudo-reactions than in typhoid.

Reactions can usually be obtained as early as the third or fourth day of the disease. It is found, however, that they do not exhibit all the elements entering into a genuine reaction, excepting in a few instances, but are more likely to be "slight" or "partial." Active movements are not entirely arrested and agglutination is incomplete. It is not until the disease has advanced to the fifth or sixth day that the typical phenomenon makes its appearance, which becomes more and more pronounced as the case progresses.

Occasionally reactions occur very early, even before any special clinical symptoms develop. In one case examined at the laboratory, a quite characteristic reaction was obtained, although no evidences of disease were present other than a loss of appetite and a tired languid feeling. The same conditions prevailed a week later with, perhaps, slight aggravation, when the gentleman called at the laboratory again. Another blood test gave the same result, but being free from temperature, and not considering himself sick, "only a little out of order," he continued his work as an electrician. Within a very few days, however, he became feverish and all his symptoms more pronounced. Soon the clinical phenomena of typhoid fever developed, and the case proved to be one of moderate severity, lasting about six weeks.

It is probable that the typhoid organisms were present in the alimentary canal a number of days before he became really sick, but not in a very active condition, and thus elaborated their toxins so slowly that the system had sufficient time to build up antagonistic substances which largely neutralized the poisons, but as soon as the bacteria became more energetic the equilibrium was destroyed and the disease became manifest.

In making a diagnosis it is essential that the previous history of the case be taken into consideration, because of the fact that the specific substance causing a reaction is often present in the blood a number of years after the recovery of the patient. Cases are reported where it has been found as long as thirty years afterwards, but this is perhaps unusual. A limited number of examinations were made at the laboratory and reactions obtained one, two, three, five and eight years after recovery. Individuals seem to vary in this respect to some extent. In one instance there was no reaction after two years, and in others only partial or incomplete reaction could be secured.

Among the diagnoses that were made, as shown by the appended tabulation of clinical reports and the results of the blood examinations, the typical reaction was obtained 66 times in cases where the subsequent clinical history verified the diagnosis as being typhoid fever. In another series of 28 cases of conditions other than typhoid the reaction was not found. Blood from these cases was examined to further demonstrate the possibility of finding the reaction present in other forms of disease. The pathologic conditions present in these patients may be seen in the clinical reports returned. Positive reactions were obtained with the blood from 10 patients in which the further clinical observation did not verify the diagnosis as being typhoid. Five of these 10 cases gave clear histories of having previously had typhoid as shown by cases 47, 48, 53, 74 and 97. The other five cases had doubtful or negative histories of having had typhoid. Case 47 had a clear history of typhoid in 1888, or nine years before, while in case 74 the patient had typhoid in 1875, or 22 years ago. In two examinations the reaction was not obtained (Cases 79 and 80), yet the subsequent clinical course proved the cases to be typhoid. The reason assigned for these failures is the small size of the drops of blood received. Both cases were in the same hospital, and the blood specimens were unsatisfactory from both. Three cases in the series are marked as doubtful as to the final clinical course, because no definite report as to the termination of the cases was received.

On page 231, for "Cases 47, 48, 53, 74 and 97," read Cases 45, 46, 51, 72 and 94.

For "Case 47 had a clear history," etc., read Case 45 had, etc.; and for "Case 74," in the same sentence, read Case 72.

In the next sentence, for "(Cases 79 and 80)," read (Cases 52 and 53).

CLINICAL REPORTS AND

| No. Case. | Date of Examination. 1896. | Date Blood Specimen. 1896. | Age. | Days Sick. | Diarrhœa. | Spleen Enlargement. | Iliac Tenderness. | Temperature. | Delirium. | Rose Spots. |
|-----------|----------------------------|----------------------------|-------|------------|--------------|---------------------|-------------------|--------------|-------------|-------------|
| 1 | Nov. 19 | Nov. 19 | 24 | 1 | Yes | ..... | ..... | 102.3 | No | ..... |
| 2 | 19 | 19 | 17 | 5 | No | Yes | Slight | Yes | No | No |
| 3 | 23 | 20 | 23 | 65 | ..... | ..... | ..... | ..... | ..... | All gone |
| 4 | 23 | 20 | 25 | 21 | No | Yes | No | Yes | No | Few |
| 5 | 23 | 20 | 22 | 31 | No | Yes | No | Yes | No | Few |
| 6 | 23 | 20 | 10 | 14 | No | No | Yes | Yes | No | No |
| 7 | 23 | 20 | 28 | 20 | No | Hard | No | Yes | Yes | No |
| 8 | 23 | 20 | 25 | 8 | No | Yes | Marked | Yes | No | Yes |
| 9 | 23 | 20 | 23 | 14 | Constipation | Slight | No | Yes | No | Yes |
| 10 | 23 | 20 | 15 | 42 | Yes | Yes | Yes | Yes | Yes | Yes |
| 11 | 23 | 20 | 40 | 25 | Yes | Very large | No | Yes | No | No |
| 12 | 23 | 20 | 40 | 13 | Yes | Yes | Yes | Yes | No | No |
| 13 | 23 | 20 | 28 | 24 | Yes | Yes | Yes | Yes | Very marked | Yes |
| 14 | 23 | 20 | 42 | 46 | Yes | Yes | Yes | Yes | No | Yes |
| 15 | 23 | 20 | 30 | 21 | Yes | Yes | No | Yes | No | Yes |
| 16 | 23 | 20 | 20 | 52 | Yes | Yes | No | No | No | No |
| 17 | 25 | 23 | 50 | 34 | At first | Yes | No | Yes | No | Yes |
| 18 | 25 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 19 | 25 | 21 | 32 | 14 | Yes | Yes | Yes | Yes | Yes | Yes |
| 20 | 25 | 24 | 25 | 7 | Slight | No | No | 101½ | No | No |
| 21 | 25 | 23 | 38 | 7 | No | Yes | No | 99-100.5 | ..... | No |
| 22 | 25 | 23 | 45 | 18 | Yes | No | Yes | 100-104 | Mania | Yes |
| 23 | 27 | 25 | 10 | 10 | No | Yes | Yes | 103-4 | No | Yes |
| 24 | 27 | 26 | 3 | 3 | No | No | No | 103 | No | No |
| 25 | 27 | 26 | 40 | 16 | No | Slight | Slight | Yes | No | No |
| 26 | 27 | 25 | 40 | 35 | 2 to 5 a day | No | Slight | ..... | Yes | Yes |
| 27 | 27 | 25 | 23 | 7 | Yes | ..... | Yes | 104 | No | No |
| 28 | 28 | 26 | 10 | ..... | Yes | Not palpable | ..... | ..... | ..... | ..... |
| 29 | 28 | 26 | 28 | 4 | Yes | Yes | Yes | Yes | Yes | Yes |
| 30 | 28 | 26 | 25 | ..... | Constipation | Palpable | ..... | ..... | ..... | ..... |
| 31 | 28 | 26 | 23 | 4 | No | Yes | No | 103 | No | ..... |
| 32 | 28 | 26 | 29 | 7 | No | No | No | No | No | No |
| 33 | 28 | 26 | 40 | 14 | Constipation | Slight | Yes | Yes | No | No |
| 34 | 28 | 26 | 32 | ..... | Yes | ..... | ..... | ..... | ..... | ..... |
| 35 | 28 | 26 | 37 | ..... | Yes | ..... | ..... | No | ..... | ..... |
| 36 | 28 | 27 | 24 | 20 | Yes | Yes | Yes | 102-103.5 | No | No |
| 37 | 28 | 27 | 23 | 9 | No | No | Yes | 101-104 | No | Few |
| 38 | 28 | 27 | 32 | ..... | No | Yes | Yes | ..... | ..... | Yes |
| 39 | Dec. 2 | Dec. 1 | 8 | 8 | No | No | No | 102.3 | No | No |
| 40 | 2 | Nov. 25 | 44 | 21 | No | Yes | No | No | No | No |
| 41 | 2 | Dec. 1 | 4 | 2 | No | No | ..... | 102 | No | No |
| 42 | 2 | Nov. 30 | 30 | 6 | ..... | Doubtful | ..... | Yes | ..... | ..... |
| 43 | 2 | 27 | 6 | 5 | ..... | Yes | No | 104 | Yes | No |
| 44 | 2 | 30 | 25 | ..... | ..... | ..... | Yes | ..... | ..... | ..... |
| 45 | 4 | Dec. 2 | 40 | ..... | ..... | ..... | ..... | Yes | ..... | ..... |
| 46 | 4 | 3 | 23 | 3 | Constipation | ..... | ..... | 105 | ..... | ..... |
| 47 | 4 | 3 | 40 | 12 | No | Slight | No | 103 | No | Few |
| 48 | 4 | 2 | 26 | 8 | No | Slight | No | 101-4 | Mild | Yes |
| 49 | 5 | 4 | ..... | ..... | Yes | No | No | 103-4 | No | ..... |
| 50 | 5 | 4 | 28 | 10 | No | Slight | Slight | 102.4 | No | Several |
| 51 | 5 | 4 | 37 | ..... | ..... | ..... | ..... | Yes | ..... | ..... |
| 52 | 5 | 4 | 27 | 22 | ..... | ..... | Marked | 103 | No | No |
| 53 | 5 | 4 | 32 | 11 | No | Slight | Slight | 101 | No | No |
| 54 | 5 | 4 | 24 | 10 | Constipation | No | Marked | 104 | ..... | Few |
| 55 | 5 | 4 | 22 | 7 | Slight | Marked | Slight | 103 | Slight | Many |

RESULTS OF BLOOD EXAMINATIONS.

| Previous Examination. | Probably. | Had Typhoid. | Cause Suspected. | Reaction. | Subsequent Clinic Diagnosis. |
|---|---|--|--|--|--|
| No No No No No | Typhoid Typhoid Typhoid Typhoid Typhoid, acute endocar. | Do not know 5 yrs. ago No No | Water Not known Not known Unknown Unknown | Yes Yes Yes Slight Slight | Typhoid Typhoid Typhoid Typhoid Typhoid, acute endocarditis |
| No No No No No | Typhoid Typhoid, diaso reaction pres. Typhoid, rheumatism Typhoid Typhoid | No No No No No | Death in family Drainage canal Unknown Unknown Unknown | Yes Slight Yes Yes No | Typhoid Typhoid Acute articular rheumatism Typhoid Not typhoid |
| No No No No No | Typhoid Typhoid? nephritis Typhoid? nephritis Typhoid Typhoid | No No No No 1891 | Unknown Unknown Unknown Unknown Unknown | Yes Yes Yes Slight Yes | Typhoid Typhoid, nephritis Typhoid, nephritis Typhoid Typhoid |
| No No Nov. 2, '96 No No | Typhoid Typhoid Do not know Typhoid Do not know | No No No No | Unknown Unknown Unknown Unknown | Yes Yes Yes Yes No | Typhoid Typhoid Typhoid Typhoid Malaria |
| Yes Yes No Yes | Doubtful Typhoid Typhoid Gastritis Malaria | Do not know No | Water Drainage canal Locality | Slight Yes Yes No Slight | Typhoid Typhoid Typhoid Not typhoid Typhoid |
| No 2 times 2 times Nov. 21 21 | Doubtful Typhoid Typhoid Typhoid Typhoid | No No No No No | Texas Unknown Death in family Drainage canal Unknown | Yes Slight Yes Slight Slight | Typhoid Typhoid Typhoid Typhoid Typhoid |
| Nov. 21 Yes Nov. 21 No No | Typhoid Myelitis Acute rheumatism Enterocolitis Enterocolitis | 5 yrs. ago No No No No | Unknown Unknown | Slight No No No No | Typhoid Chronic myelitis Articular rheumatism Enterocolitis Enterocolitis |
| Yes Yes No No No | Not known Typhoid Typhoid Do not know Typhoid | No 1893 No No | Water Unknown | Yes Yes Slight Slight Yes | Typhoid Typical typhoid Typhoid Mild typhoid Typhoid |
| No No No | Typhoid Typhoid Typhoid Relapsing, appendicitis Gonorrheal rheumatism | 1893 No 1888 | Unknown Unknown Unknown | Slight Slight No No Yes | Typhoid Typhoid Empyema Appendicitis Gon. rheumatism, ulceration, endocarditis |
| No | Pneumonia Nervous case Typhoid Typhoid Do not know | 1 month ago No 1894 No | Water Unknown Nursing | Yes No Slight Yes Slight | Pneumonia Neurasthenia Typhoid Typhoid Typhoid |
| Yes | Gon. rheumatism Peritonitis Do not know Peritonitis Doubtful | 1891 No No | None definite None definite Water Water | Yes No No No No | Endocarditis Typhoid Typhoid Not typhoid Not typhoid |

CLINICAL REPORTS AND

| No. Case. | Date of Examination. 1896. | Date Blood Specimen. 1896. | Age. | Days Sick. | Diarrhoea. | Spleen Enlargement. | Iliac Tenderness. | Temperature. | Delirium. | Rose Spots. |
|-----------|-------------------------------|-------------------------------|------|------------|---------------|---------------------|-------------------|------------------|-----------|-------------|
| 56 | Dec. 5 | Dec. 4 | 29 | 6 | Yes | Yes | Yes | Yes | No | No |
| 57 | 6 | 6 | 24 | 16 | No | No examination | Yes | Yes | No | No |
| 58 | 8 | 5 | 10 | 3 | No | No | Yes | 99.5 | No | No |
| 59 | 8 | 5 | 4 | 7 | No | No | Yes | 99 | No | No |
| 60 | 8 | 5 | 17 | 21 | No | Yes | No | 99 | No | No |
| 61 | 8 | 6 | 18 | 6 | Yes | Yes | Yes | Yes | No | No |
| 62 | 8 | 6 | 10 | 7 | Yes | No | Yes | 100-103 | No | No |
| 63 | 8 | 5 | 39 | 7 | No | No | Yes | 101.5-102.5 | No | Yes |
| 64 | 8 | 5 | 4 | 3 | Constipation | No | Yes | 103 | No | No |
| 65 | 8 | 5 | 14 | 2 | Constipation | No | Yes | 103.2 | No | No |
| 66 | 9 | 4 | 35 | 6 | No | No | Yes | 100-104 | No | No |
| 67 | 10 | 7 | 27 | 7 | No | No | No | 102 | No | No |
| 68 | 10 | 7 | 26 | 8 | Constipation | Yes | Yes | Yes | No | No |
| 69 | 10 | 9 | 47 | 21 | No | No | No | Chills and fever | No | No |
| 70 | 11 | 23 | 14 | 14 | Yes | Yes | Yes | Yes | No | Yes |
| 71 | 11 | 8 | 30 | 3 | Yes | No | No | 103 | No | No |
| 72 | 11 | 9 | 14 | 15 | Yes | No | No | 105.5 | No | No |
| 73 | 11 | 9 | 29 | 3 | No | Yes | Yes | 101.5 | No | No |
| 74 | 12 | 10 | 2½ | 5 | Yes | No | No | 102 | No | No |
| 75 | 12 | 10 | 2½ | 5 | Yes | No | No | 102 | No | No |
| 76 | 12 | 10 | 27 | 3 | No | No | Yes | Yes | No | No |
| 77 | 14 | 12 | 27 | 6 | No | No | Yes | 101 | No | No |
| 78 | 14 | 12 | 12 | 12 | No | No | No | No | No | Red rash |
| 79 | 14 | 12 | 9 | 5 | No | No | No | 100-102 | No | No |
| 80 | 14 | 12 | 9 | 5 | No | Yes | No | 105 | No | No |
| 81 | 14 | 11 | 36 | 1 | No | No | No | Yes | No | No |
| 82 | 14 | 11 | 7½ | 3 | No | No | No | 101.5 | No | No |
| 83 | 14 | 11 | 53 | 3 | Yes | Slight | Yes | Yes | No | No |
| 84 | 14 | 11 | 17 | 4 | No | No | Slight | 99.2 | No | No |
| 85 | 17 | 16 | 36 | 1 | No | No | No | Yes | No | No |
| 86 | 17 | 15 | 35 | 3 | Typhoid stool | No | Yes | 101 | No | No |
| 87 | 17 | 15 | 9 | 8 | Constipation | Yes | Yes | 101-103 | No | No |
| 88 | 17 | 14 | 16 | 4 | No | No | No | 103-104.5 | No | No |
| 89 | 17 | 15 | 28 | 6 | Yes | Yes | No | 102 | No | No |
| 90 | 18 | 15 | 7 | 9 | Yes | No | Yes | 103 | No | No |
| 91 | 18 | 16 | 40 | 2 | Yes | Yes | No | 101 | Yes | Yes |
| 92 | 18 | 17 | 16 | 23 | Yes | No | No | 105 | No | No |
| 93 | 19 | 19 | 40 | 3 | No | No | Yes | 100.5 | No | No |
| 94 | 19 | 18 | 21 | 8 | Yes | No | No | 103 | No | No |
| 95 | 19 | 18 | 30 | 17 | No | No | No | 103 | No | No |
| 96 | 23 | 20 | 21 | 1 | No | Tender | Slight | 103 | No | No |
| 97 | 23 | 19 | 19 | 19 | No | No | No | 99.2 | No | No |
| 98 | 23 | 20 | 24 | 3 | No | No | No | 100.5 | No | No |
| 99 | 23 | 21 | 40 | 5 | No | No | No | 101-103 | No | Few |
| 100 | 26 | 22 | 69 | 6 | Yes | No | Yes | 101-103 | No | No |
| 101 | 26 | 23 | .... | 4 | No | Yes | Yes | 99.8 | No | No |
| 102 | 26 | 22 | 32 | 6 | No | No | Yes | Yes | No | No |
| 103 | 30 | 28 | 29 | .... | No | No | Yes | Yes | No | No |
| 104 | 31 | 25 | 35 | .... | No | No | Yes | 100 | No | No |
| 105 | 31 | 1½ | .... | .... | Yes | No | No | 102-105.5 | No | No |
| 106 | 31 | 28 | .... | .... | No | No | No | 101-105 | No | No |
| 107 | 31 | 27 | .... | 6 | No | No | Slight | 102 | No | No |
| 108 | 31 | 28 | 4½ | 8 | No | No | No | 102-104 | Yes | No |
| 109 | 31 | 27 | 24 | 7 | Yes | No | No | Yes | Slight | Yes |

Reaction found 66 times, verified as typhoid.

Reaction found 10 times, not verified as typhoid.

RESULTS OF BLOOD EXAMINATIONS—Continued.

| Previous Examination. | Probably. | Had Typhoid. | Cause Suspected | Reaction. | Subsequent Clinic Diagnosis. |
|---------------------------------|--|--|---|---------------------------------------|---|
| No Yes No Yes Yes | Doubtful Walking typhoid Typhoid Typhoid Typhoid | No No Not known Think so | Unknown Water Unknown Unknown Unknown | Yes Yes Yes Slight Slight | Mitral insufficiency Typhoid Mild typhoid Mild typhoid Doubtful |
| No Yes Yes No No | Typhoid Has mumps Do not know Do not know Doubtful | No No No No No | Unknown Lake water Water | Yes Yes No Slight Slight | Typhoid Typhoid Tuberculosis of intestines Typhoid Typhoid |
| No No No | Typhoid Not known Not known Mild typhoid Malaria | 1881 1889 No | Unknown Water | Yes No No Yes Yes | Typhoid Not typhoid Not typhoid Typhoid Malaria |
| No No Yes No | Typhoid Doubtful Gastro enteritis Mitral incompetency Entero colitis | No 1875 No | Unknown Unknown | Yes Yes No No No | Malaria, endocarditis Bronchitis and pleurisy Gastro-enteritis Mitral incompetency Ilio-colitis |
| No Yes No Yes No | Continued F. Typhoid Doubtful Do not know Typhoid | No No | Water Water | No Yes Yes No Yes | Gastritis Typhoid Typhoid Not typhoid Typhoid |
| No No No No | Doubtful Doubtful Typhoid Gastritis Do not know | No No No No | Contagion Contagion Do not know School | No No Slight No Yes | La Grippe Not typhoid Typhoid Not typhoid No diagnosis |
| No Yes No | Ambulatory typhoid Abortive typhoid Doubtful Typhoid Do not know | No No No No | Barnyard well | Yes Slight Yes Yes Slight | Typhoid Typhoid Typhoid Typhoid No diagnosis |
| No Yes No Yes | Typhoid Typhoid Do not know Do not know Pneumonia | No No No 1888 No | Unknown Water Not known | Yes Yes Yes Slight No | Acute bronchitis Typhoid Typhoid Not typhoid Not typhoid |
| Yes No Yes No | Do not know Typhoid Doubtful Typhoid Typhoid | No No No No | Water Texas Water | No Yes No Yes Slight | Not typhoid Typhoid Enteritis Typhoid Typhoid |
| No Yes Yes | Influenza Gastro enteritis Influenza Do not know | No No No No | None Contagion | No Yes No Yes Yes | Influenza Typhoid Indigestion Typhoid Typhoid |
| Yes | Doubtful Typhoid Do not know Do not know | No No No No | Find none | Yes Slight Yes Slight | Typhoid Typhoid Typhoid Typhoid |

Reaction found 3 times; diagnosis doubtful.

Reaction not found 2 times, verified as typhoid.

Reaction not found 28 times, verified not typhoid.

MISCELLANEOUS EXAMINATIONS.

ADOLPH GEHRMANN, M. D., CITY BACTERIOLOGIST.

GLYCERINIZED VACCINE.

Beginning with July, 1895, a systematic bacteriologic examination of vaccine used by the DEPARTMENT was regularly undertaken by the City Bacteriologist, at the suggestion of the ASSISTANT COMMISSIONER. This was necessitated because of the results obtained from tests that were made of ivory points in use and those on the market. In all of these bacteria of suppuration were found present in larger or lesser numbers. Some of the cultures showed as many of these bacteria as would be found in cultures made directly from pus from abscesses, while the clinical efficiency was shown to lessen rapidly where the ivory points, of the same lot, were used in a test extending over a period of time. Knowing from experiments presented, and from literature, that glycerine exercises a decided preservative action upon vaccine, and at the same time greatly reduces the virulence of the bacteria and in time entirely destroys their vitality, it was sought to obtain a liquid vaccine in glycerin in which the numbers of bacteria were reduced to the minimum, and at the same time one that had not deteriorated in vaccinal efficiency. The experiments that have been made since glycerinized vaccine has been used by the DEPARTMENT, show that the period of contact of the pus bacteria with glycerin necessary to destroy their vitality is from fifty to sixty days. Some other bacteria, especially those containing spores, require much longer contact, as much as five months being required for some. The period of efficiency for glycerinized vaccine that can be uniformly assured, as determined by primary vaccination experiments, is from 120 to 150 days. It has, therefore, been found to be most satisfactory to obtain and to use

vaccine material in this form during the third and fourth month after it has been removed from the calf.

It is now a definite provision that the vaccine delivered to the DEPARTMENT for use, shall be a sixty-day emulsion in glycerin, and it is so arranged in the DEPARTMENT that the entire lot received can be completely used during the next thirty or forty days.

From the accompanying tables an idea may be had as to the bacterial condition of the vaccine used. If upon examination of any colonies appearing upon the cultures, these are found to be species of pus bacteria, the vaccine is rejected. The occasional appearance of saprophytes, moulds or yeasts, has not been deemed sufficient reason for condemning the lot. The method of examination consists in planting drops of the glycerin emulsion upon slant agar and spreading it out over the surface or into bouillon of ordinary composition. The tubes are cultivated in an incubator for two or three days, and the growth, should any make its appearance, is further examined by microscopic preparations or further cultures. In addition to this examination a second lot of tubes from each lot is examined for the *Bacillus tuberculosis* by staining, after the method of staining this bacillus in sputum. So far, however, it has been impossible to demonstrate the *tuberculosis* in any of the specimens of vaccine received at the laboratory, either from the regular source of supply, or from those samples which were delivered in competitive tests or for other purposes.

The accompanying table of examinations will show the results of the examinations as made from the different lots of vaccine material received. Such a lot of vaccine consists of 5000 tubes, each tube containing sufficient for a single vaccination, packed in boxes containing ten tubes each. From each lot ten boxes are selected from different parts of the lot of boxes as they occur in the original package.

The examinations made January 26th, April 30th and June 1st illustrate very well the general character of the material, when it is accepted as satisfactory and ready for use. In addition to these, however, it may be said that ten tubes for clinical test are selected and are sent to the Chief Medical Inspector, Dr. GARROTT, for his part of the examination.

The examination in the column marked "September 9, 1896," shows a series of cultures upon which no bacteria developed. This evidently was an old lot of vaccine and the clinical tests made at the same time were unsatisfactory, so that it was necessary to reject this particular lot. The examination of vaccine in the column marked "September 19, 1896," was from a lot of vaccine in which there had not been sufficient time for the glycerin to act upon the bacteria contained, and this lot was rejected because of the presence of pus bacteria and a large number of saprophytes.

The last column also marked "September 19, 1896," but upon which a re-examination was made November 3, 1896, was from the same vaccine in the ten boxes originally selected from this lot, and tested September 21, 1896, or fifty-three days after the first examination. It will at once be seen that the relative numbers of bacteria present of different kinds had decreased to such an extent that this lot of vaccine could have been used during November without any of the dangerous results that were possible from the material at the time the first examination was made. The lot had, however, been returned, and the examination was made simply to determine the result that would take place as the vaccine became older and more time was given for the action of the glycerin.

In all of these tables the plus marks indicate growth, while the minus marks indicate that there was absence of growth, and the particular variety of organisms is indicated by the columns in which the marks occur.

REPORT OF DEPARTMENT OF HEALTH

| Vaccine received | January 24, 1895. | April 16, 1896. | June 1, 1896. | Sept. 9, 1896. | Sept. 19, 1896. | Sept. 19, 1896. |
|------------------------|---|---|---|---|---|---|
| Cultures made | January 26, 1896. | April 30, 1896. | June 1, 1896. | Sept. 9, 1896. | Sept. 21, 1896. | November 3, 1896. |
| | Pus bacteria. Saprophytic bacteria. Mould, yeast. | Pus bacteria. Saprophytic bacteria. Mould, yeast. | Pus bacteria. Saprophytic bacteria. Mould, yeast. | Pus bacteria. Saprophytic bacteria. Mould, yeast. | Pus bacteria. Saprophytic bacteria. Mould, yeast. | Pus bacteria. Saprophytic bacteria. Mould, yeast. |
| Specimen 1, a..... | + | - | ..... | ..... | + | ..... |
| Specimen 2, a..... | + | - | ..... | ..... | + | ..... |
| Specimen 3, a..... | + | - | ..... | ..... | + | ..... |
| Specimen 4, a..... | + | - | ..... | ..... | + | ..... |
| Specimen 5, a..... | + | - | ..... | ..... | + | ..... |
| Specimen 6, a..... | + | - | ..... | ..... | + | ..... |
| Specimen 7, a..... | + | - | ..... | ..... | + | ..... |
| Specimen 8, a..... | + | - | ..... | ..... | + | ..... |
| Specimen 9, a..... | + | - | ..... | ..... | + | ..... |
| Specimen 10, b..... | + | - | ..... | ..... | + | ..... |

EXAMINATION OF FILTERS.

An extended examination as to the efficiency of filters suitable for introduction into the public schools was undertaken by the HEALTH DEPARTMENT at the request of the Board of Education during the latter three months of 1896, it being admitted that the water supply was not of good quality. It was decided that some steps be taken to supply a better quality of drinking water to the pupils in the city schools. The DEPARTMENT offered to assist the Board of Education in every possible way to determine the best and also the cheapest method. Finally, at the request of the COMMISSIONER, it not having been possible to decide on any definite plan, the supply of drinking water was shut off from the drinking fountains in all the schools. As the Board of Education had decided to make an investigation of the various forms of filter suitable, firms manufacturing appliances were asked to equip school buildings and to allow the apparatus to be subjected to a sixty-day trial by the DEPARTMENT OF HEALTH. Nineteen filters were entered in this competition; all of them, however, were not in school buildings, one being placed in the basement of the City Hall and four being placed in the laboratory. The schools which were equipped with filter appliances were located in the Lake View district, as the water supply from the Lake View tunnels was of a more dangerous character than that from the other sources of supply. The plan of examination consisted in, first, a series of analyses of the filtered water, both chemic and bacteriologic, while the filters were under the control and management of the filter companies or their agents; second, a test of the filter medium to determine whether it was germ-proof or not, and lastly a test of those proving to be germ proof to determine their resistance to the "growing through" of bacteria. The first part of the examination showed that five of

fourteen filters then under examination were capable of acting upon the water to a sufficient extent, and were of such construction that a fouling could be so prevented as to furnish a filtered water of good sanitary quality for a period of several weeks. In the other cases it was found that the analyses showed gradual increasing fouling of the filtering medium day after day as the filter was used, and in some cases the methods which were arranged for cleaning the medium were so inadequate that the fouling increased to such a degree that the water was worse, even after the filters were cleaned, than before. The other five filters, which were not in schools, were not tested by this method, as it was found that the amount of work was too great and they were entered in the competition upon their germ-proof merits without other considerations. The preliminary test having been made the filters were then tested as to their germ-proof properties, and it was found that five filters could be accepted as being germ-proof upon the preliminary trial. The Board of Education was then advised that the remaining filters should be removed as they were not capable of purifying the water to a sufficient degree. Of the five filters not in schools, two were found to be germ-proof and the others not. These seven filters selected as germ-proof were then subjected to a long continued test to determine the period required for the bacteria to grow through the filter medium, and it was found that in one of the filters the test bacterium was found in the filtered water six days after application, in another eleven days after application, another fifteen days, and the four others were tested for a period of thirty days each, and remained germ-proof during this period. The Board of Education was now advised that any of these seven filters would be satisfactory to the DEPARTMENT OF HEALTH, provided that the filtering medium could be regenerated, changed, or cleaned to a sufficient degree or in a satisfactory manner to prevent growing through,

such period of usefulness to be the period of days in which the test bacterium did not pass through the filter in each particular case.

The test to determine the germ-proof qualities of the culture medium was made by applying *Bacillus prodigiosus* to the unfiltered water, by pouring a bouillon culture into the pipe supplying water to the apparatus, and then removing samples of filtered water, usually about a litre at a time, into sterilized flasks containing 50 cc. of concentrated beef tea (this beef tea being double the strength of the usual formula). The flasks containing the samples of water and beef tea were then allowed to remain at room temperature for two or three days until a decided growth had appeared. The water was now poured out over the surfaces of sterilized potatoes, cut through and placed under bell jars. It was then to be observed within the next few days whether the red color produced by the test bacterium would appear upon the potatoes or not. In some instances the growth of other bacteria was so great that water from the first flask was transferred to other flasks containing beef tea, and then on to a second or even third series of potatoes, and sometimes when the growth simply appeared pink upon the potatoes it was transplanted from these potatoes directly to other sterile potatoes. During the period of test the ordinary methods of cleaning the filter were carried out by the representatives of the DEPARTMENT, the filters at this time not being under the control of the agents of the filter companies. A regeneration of the medium was not permitted, so that the same tubes or the same media were used during this entire period, the test bacterium being simply reapplied each time after the ordinary methods of cleaning had been employed, the idea being to determine efficiency with a continuously-infected water supply.

As to the kinds of filters tested, three were unglazed porcelain tube filters, four were clay filters, the tubes being of various degrees of thickness; three were sand filters; four were natural stone filters; one was a natural silicious stone filter; one was a charcoal filter, and three were filters in which the filtering medium was some form of cotton or vegetable pulp. The test finally showed that those filters equipped with automatic cleaning arrangements, which precluded any easy opening of the apparatus and regeneration of the medium, gradually became so foul that the filtered water showed upon examination a worse quality than before filtration. Others, which were to be cleaned by hand, gave a much better result. The filters giving the highest efficiency were found to be those where the filtering medium was unglazed porcelain. One clay filter, however, gave such excellent results that it can be ranked with those in which the medium was porcelain.

The final outcome of the examination of filters for the Board of Education has not resulted, up to this time, in the selection of any particular form of apparatus. The item of cost, apparently, has been such that the Board of Education could not see its way clear to selecting an apparatus which would be sufficiently easy in its manipulation and satisfactory in its action upon the water.

The following tables are illustrative of the changes in the water applied to filters, and specially show the increased fouling while the filter is in use.

| Number of Sample. | Source of Sample. | Total Solids. | Loss on Ignition. | Non-Volatile Mineral Solids. | Free Ammonia. | Albuminoid Ammonia. | Nitrogen as Nitrates. | Total Nitrogen. | Chlorine. | Oxygen Consumed in 10 min. at 100° C. | Date of Collection. | Bacteria per cc. | Growth in 15% Carbolic Bouillon. | Kinds of Pathogenic Bacteria Found. |
|-------------------|-------------------|---------------|-------------------|------------------------------|---------------|---------------------|-----------------------|-----------------|-----------|---------------------------------------|---------------------|------------------|----------------------------------|-------------------------------------|
| 2418 | Filtered | 13.20 | 2.30 | 10.90 | .001 | .005 | None | .0048 | .60 | .110 | Oct. 19 | 400 | No | None |
| 2419 | Unfiltered | 19.90 | 3.20 | 16.70 | .001 | .013 | None | .0112 | .60 | .300 | Oct. 19 | 5,600 | No | None |
| 2451 | Filtered | 13.30 | 3.10 | 10.10 | .001 | .008 | None | .0072 | .60 | .100 | Oct. 21 | 11,000 | No | None |
| 2452 | Unfiltered | 16.30 | 3.60 | 12.70 | .001 | .011 | None | .0096 | .60 | .230 | Oct. 21 | 7,900 | No | None |
| 2536 | Filtered | 14.40 | 3.40 | 11.00 | .001 | .032 | None | .0264 | .60 | .130 | Oct. 27 | 18,500 | No | None |
| 2537 | Unfiltered | 14.60 | 3.80 | 10.80 | .001 | .019 | None | .0160 | .60 | .150 | Oct. 27 | 8,500 | No | None |

SANITARY ANALYSIS OF WATER FROM FILTER AT SCHOOL NO. 5.

| | | | | | | | | | | | | | | |
|------|------------------|-------|------|-------|------|------|------|-------|-----|------|---------|--------|----|------|
| 2403 | Filtered A | 13.50 | 2.30 | 11.20 | .002 | .006 | None | .0054 | .60 | .100 | Oct. 16 | 22,500 | No | None |
| 2404 | Filtered B | 13.90 | 2.20 | 11.70 | .001 | .006 | None | .0056 | .60 | .110 | Oct. 16 | 4,000 | No | None |
| 2405 | Unfiltered | 14.90 | 3.10 | 11.80 | .001 | .008 | None | .0072 | .60 | .160 | Oct. 16 | 2,000 | No | None |
| 2485 | Filtered A | 14.00 | 3.50 | 10.50 | .001 | .006 | None | .0056 | .60 | .110 | Oct. 23 | 8,000 | No | None |
| 2486 | Filtered B | 13.70 | 3.20 | 10.50 | .001 | .014 | None | .0120 | .60 | .140 | Oct. 23 | 17,500 | No | None |
| 2487 | Unfiltered | 14.10 | 3.20 | 10.90 | .001 | .012 | None | .0104 | .60 | .190 | Oct. 23 | 480 | No | None |
| 2555 | Filtered A | 13.40 | 2.40 | 11.00 | .008 | .017 | None | .0200 | .65 | .130 | Oct. 28 | 15,500 | No | None |
| 2556 | Filtered B | 13.60 | 3.70 | 10.90 | .007 | .014 | None | .0168 | .65 | .100 | Oct. 28 | 8,000 | No | None |
| 2557 | Unfiltered | 14.00 | 2.90 | 11.10 | .004 | .015 | None | .0152 | .65 | .160 | Oct. 28 | .80 | No | None |
| 2569 | Filtered A | 13.20 | 2.10 | 10.90 | .005 | .012 | None | .0136 | .65 | .100 | Oct. 29 | 8,000 | No | None |
| 2570 | Filtered B | 12.80 | 1.90 | 11.10 | .001 | .012 | None | .0104 | .65 | .110 | Oct. 29 | 11,300 | No | None |
| 2571 | Unfiltered | 13.30 | 2.10 | 11.20 | .002 | .020 | None | .0176 | .65 | .170 | Oct. 29 | 6,200 | No | None |

SANITARY ANALYSIS OF WATER FROM FILTER AT SCHOOL NO. 11.

| | | | | | | | | | | | | | | |
|------|------------------|-------|------|-------|-------|------|------|-------|-----|------|---------|--------|----|------|
| 2524 | Filtered | 14.00 | 2.80 | 11.20 | .058 | .015 | None | .0584 | .60 | .120 | Oct. 26 | 7,000 | No | None |
| 2525 | Unfiltered | 14.90 | 3.40 | 11.50 | Trace | .009 | None | .0072 | .60 | .150 | Oct. 26 | 4,800 | No | None |
| 2570 | Filtered | 14.80 | 3.30 | 11.50 | .025 | .023 | None | .0384 | .70 | .140 | Oct. 28 | 19,000 | No | None |
| 2561 | Unfiltered | 14.90 | 2.90 | 12.00 | .001 | .021 | None | .0176 | .70 | .160 | Oct. 28 | 2,900 | No | None |
| 2575 | Filtered | 13.20 | 2.90 | 11.30 | .015 | .011 | None | .0208 | .70 | .170 | Oct. 29 | 11,000 | No | None |
| 2576 | Unfiltered | 14.50 | 3.00 | 11.50 | Trace | .011 | None | .0088 | .70 | .170 | Oct. 29 | 12,000 | No | None |

MEAT INSPECTION.

November 6th a division of meat and food inspection was placed under the direction of the laboratory. Previous to this time the DEPARTMENT Secretary had it under his direction. The method of inspection may be divided into three branches—inspection at the Union Stock Yards and the other abattoirs, the railroad, express and freight offices, and the inspection of the city markets. To carry out the inspection of meat nine inspectors are employed. At the Union Stock Yards a chief inspector and four assistants are constantly on duty. The chief object of the work here is to prevent carcasses that have been condemned by the Government or State inspection from coming on our local market; to see that slaughtering is not done after hours as regulated by ordinance; and to destroy upon the hoof all emaciated and obviously diseased stock that might be sold and removed from the Stock Yards for slaughter at other places. Our inspection is in perfect harmony with the U. S. Bureau of Animal Industry and the State Board of Live Stock Commissioners. The three departments work hand in hand and condemnations that are made by one are reported to the other so as to prevent anything from escaping. Each Saturday the City Inspector is present at the post mortem examination held by the State Board of Live Stock Commissioners of stock condemned on the hoof, especially for actinomycosis and other conditions which are obviously pathological. This stock is either condemned or passed upon the post mortem examination, but the tendency has been to become more and more strict, and every case that shows any extent of disease at all or any rupture of a local condition into the digestive tract, or an involvement of the glands, the glands of the neck as in actinomycosis, are condemned without question. On Wednesday condemnations on the hoof that

have been made by the Bureau are held and post mortems are made. The City Meat Inspector is also present. The State and Government authorities simply make condemnations and see that the carcasses so condemned do not pass into the foreign trade, while the special business of the local City Meat Inspector is to see that the carcasses are transferred to the rendering tank and are not cut up and escape to the local butchers. A very good regulation which has been recently instituted is one requiring all slaughter-house officials to notify the city when they propose to slaughter stock after 7 o'clock in the evening. It had been the practice in former times to hold a certain number of animals and to slaughter them some time during the night, to remove the carcass before morning, and in this way escape all possible detection. A fine of \$200 is now imposed whenever slaughtering takes place after 7 o'clock in the evening without due notice having been given to the city authorities, and no doubt this has prevented the passage of a large number of diseased carcasses upon our market. The number of carcasses examined by these five inspectors is very large as one may see by referring to the table of condemnations, the condemnations being simply a small percentage of the entire amount of meat examined, and still the number of pounds of meat condemned and put into the rendering tanks by the City Inspectors alone at the Stock Yards amounts to about 2 000 000 pounds per year.

The inspection at the local express and freight offices is conducted under the direction of four inspectors, to whom these different offices are assigned, and who make their rounds daily, reaching the stations at about the time the trains arrive. The class of meats that they examine are mostly veal, dressed hogs and game. It has been the practice for a long time, especially among dairy men, to send every calf,

whether born dead or alive, within two or three days after birth into the city for sale. A large number of these calves have not been properly slaughtered, often delayed in transportation and are undersized, and the object of inspection in this direction is to preserve the quality of veal and to attempt, so far as possible, to force the dairymen to keep their young calves in the country until they are of sufficient size to make a salable and desirable quality of veal. Game is examined more particularly for souring, due to delay in transportation and to unusual changes in the weather. The hogs that are examined in this branch of the work are largely those that have become sick or that have died on the farmer's hands, and are then butchered and sent to market, and it is sometimes a difficult matter to decide as to the condition of a hog because none of the organs are present, and frequently diseased portions have been so cut out, or the animal has been bruised in areas which would show disease, that the pathologic changes are entirely covered up or removed in an attempt to get the hog upon the market.

Each month, during periods when hog cholera exists, a large number of carcasses that may be shown to have suffered from hog cholera are condemned. The condemned carcasses at the stations and depots are collected by a wagon that passes around from one station to another several times during each day, and are transferred to a rendering establishment where they are put into the tanks under the direction of the City Meat Inspector. An average of from 5000 to 6000 carcasses of calves are examined weekly, and several thousand pounds of game and poultry are likewise inspected.

The inspection of markets consists largely of the work required upon South Water street, at Fulton street and the Haymarket. These are distributing points for butchers and grocers throughout the entire city. The inspection here is

conducted by three inspectors, and they inspect all kinds of meat, vegetables, fruits and raw fruit products. At this point, the least possibility for a dealer to get material unfit for food upon the market exists. There is constantly a possibility that he may escape being caught at one of the slaughter houses, at the railway depots, or he may be a farmer in the neighborhood who brings his goods into the city in his own wagon, and the inspectors have to be constantly on the alert to pick up these carcasses or lots of food which may have escaped some of the other inspectors. Some time is devoted to the inspection of the butcher shops and local markets of the city, but the force of inspectors is entirely too small to conduct anything like a systematic investigation of their condition, and the examinations that have so far been made are more in compliance with requests from the public when complaints are made that they are not receiving good meat or other supplies; but in the majority of localities in the city the local butcher is obliged by public opinion and constant competition to keep his market in good condition and to sell food that can be received by the public without criticism. In some of the poorer districts, however, numbers of instances of butchers and market men selling second quality of goods have been found and such conditions have been remedied by threats, confiscation of supplies, and even by revoking the license.

The following ordinance before mentioned, passed by the City Council, January 4th, 1897, has been productive of a great deal of good, especially as it has prevented the slaughter of cattle when the City Meat Inspectors were not present, and also the removal of dead or dying animals to slaughter houses, where they were dressed and then pirated on to the market. It has also brought the destruction of emaciated cattle under the immediate supervision of the

City Meat Inspectors, and has reduced by over 50 per cent. the number of cattle of this kind brought into the city.

THE ORDINANCE.

Be it Ordained by the City Council of the City of Chicago:

SECTION 1. That all meat condemned in the City of Chicago by Government or State Meat Inspectors, shall be destroyed under the supervision and subject to the directions of the City Meat Inspectors.

SEC. 2. That no owner of a slaughter house shall slaughter cattle, sheep or hogs after the hour of 7:00 o'clock p. m., or on Sundays, without first notifying the City Meat Inspectors.

SEC. 3. All emaciated cattle condemned in the City of Chicago shall be destroyed by, and under the supervision and subject to the directions of, the City Meat Inspectors.

SEC. 4. No carcasses of dead animals shall be brought within the precincts of any slaughter house in the City of Chicago.

SEC. 5. Any person, firm or corporation who violates, disobeys, omits, neglects or refuses to comply with any of the provisions of this ordinance, or who refuses to comply with them, or who resists any officer or order acting or operating thereunder, shall, upon conviction, be deemed guilty of a misdemeanor and fined not less than fifty (50) dollars, nor more than two hundred (200) dollars.

SEC. 6. All ordinances or parts of ordinances in conflict herewith, be and the same are hereby repealed.

SEC. 7. This ordinance shall take effect and be in force from and after its passage and due publication.

DISINFECTION AND DISINFECTANTS.

To set at rest the doubt of the ASSISTANT COMMISSIONER as to the efficiency of the fumigations performed by the DEPARTMENT, a series of experiments were undertaken by the laboratory to determine the actual value of the methods in use. This was found of such interest that the same line of work has been continued more or less completely during the entire year of 1896. Cultures are now

regularly supplied to the fumigators to be exposed during fumigations. It is directed that the cultures be placed in different parts of the room, and that the cotton plugs of some be left in place, while others be withdrawn during the exposure. The cultures are prepared as follows: Each morning before the fumigators receive their assignments, the cultures to be used during that day are prepared. These are slant agar-streaked cultures of some well-known species. The *Bacillus mesentericus vulgatus* and *Bacillus subtilis* are most frequently employed. These are used because of their well-known resistance, and because there can be no danger to the fumigators should a culture tube accidentally be broken, which does not infrequently happen. When received by the fumigators there is no growth visible, the inoculation having been just made; the tubes are simply numbered. One similarly inoculated tube is always retained in the laboratory as a control. The fumigators carry the culture tubes in the ordinary form of Pillsbury microscope slide-box; the tubes are exposed, as was said, in different parts of the room to be fumigated, some having the cotton plug withdrawn, others with it in place. At the end of the period of fumigation they are returned to the laboratory with a slip giving information necessary for identification of the locality and work done. Sometimes the tubes are cultivated in the incubator, but more usually room temperature is used. This method of controlling the fumigations at once showed that the time of exposure to sulphur dioxide was frequently too short, and that the amount of sulphur used was often less than that actually required. Exposure less than four hours always showed incomplete sterilization. In a great many tubes bacteria failed to develop in the upper part of the agar, while an abundant growth occurred below, and those that had been exposed under pillows and covers generally grew over the entire surface. It was soon apparent that

when less than four pounds of sulphur was burnt to the thousand cubic feet of space, only partial sterilization resulted. Entire sterilization of cultures exposed was uniformly accomplished with an exposure of not less than six hours, and a combustion of full four pounds of sulphur for every thousand cubic feet of space in the rooms fumigated. All experiments were made, however, with the bacteria in a moist condition.

Special investigations in regard to the efficiency of various methods of fumigation have been made from time to time during the two years. During March and April, 1895, a series of cultures and determinations from specimens obtained from sewer water and material upon the walls of sewers was made to show the value of a special compound that was proposed as a means of disinfecting sewage as it flowed through sewers, and also to prevent any spread of disease from the air or the dry particles upon the walls of sewers that might be carried with the air to neighboring houses, or that could pass into the atmosphere through manholes and ventilators of sewers. The compound used in these experiments consisted essentially of sulphur mixed with several organic substances, the exact nature of which was not determined. The method used consisted in placing pans filled with the lighted compound at short distances along the sewer, closing the manholes and ventilators tightly, thus allowing the gases to permeate into every part and to be absorbed as fully as possible by the water and sewage flowing through it. The results of these experiments indicate that a marked degree of purification and the destruction of bacteria present could be accomplished to a considerable extent when the treatment was undertaken with a considerable quantity of the compound, and was continued with great regularity; but the amount of care and the persistency of treatment that was required to attain these results were such that it would

be almost impractical, or at least very expensive to carry out the method, so that it would be possible to obtain any results of a satisfactory character. Some precipitation, more or less marked, was always noted in regard to the sewer water so treated, but no provision was made for the treatment of the resulting sludge, which eventually would find its way to the mouth of the sewer where it would be reinfected with bacteria and active decomposition would be re-established. It does not seem at all practical to use a method of this kind in the general treatment of sewage. First, because of the item of expense; second, because of the inability to apply the treatment with sufficient regularity; and, lastly, because the sludge could not be removed without the establishment of works in which the precipitation could be completed and the clarified water withdrawn.

Another series of experiments was made upon the air contained in the sewers. Those proposing this method were under the impression that the sewer air was the most dangerous element in connection with disposal of sewage by ordinary means. The results obtained were in close accord with those made in the other series of experiments.

During September, 1895, an extended series of experiments was made with sulphur dioxide that had been reduced to a liquid state and stored in receivers containing about a pound each of liquified gas. Each of these cans contained sufficient gas when liberated to treat a room containing 1728 cubic feet. This method has the advantage that as soon as the receiver containing the liquid gas is opened the gas is at once evolved. The danger from fire is also avoided as no heat is used, and the amount of gas that can be delivered into a given space is determined simply by the amount of liquid set free, and not as in ordinary sulphur fumigations, by the amount of oxygen present. It was

proposed to arrange a small station with the necessary compression apparatus and receivers to collect the gases liquified from burning sulphur and to refill receivers of such size and shape as to be easily handled by the fumigators and carried from house to house. The results attained in the exposures of cultures to the gases liberated from the liquid were such that we are warranted in looking upon the method as one that would give satisfaction when the amount of gas liberated is equivalent to that obtained by the combustion of four pounds of sulphur to the thousand cubic feet. However, the item of expense of equipping a plant for the liquefaction of sulphur dioxide and the cost of receivers was such that up to this time nothing definite has been done in this direction.

During January, 1896, a fumigating apparatus was introduced to the notice of the DEPARTMENT and its use was strongly advocated to those having it in charge. A series of experiments was made with this apparatus to determine if possible any advantages that it might have over the ordinary methods in use. This apparatus consisted of a stove-like appliance in which sulphur was ignited by means of a bed of burning charcoal. The efficiency depended entirely upon the production of sulphur dioxide. Some other chemicals were used in this connection, but to us did not seem to be an important part of the method. The experiments as to the efficiency in the destruction of cultures of bacteria exposed were not different from those attained by the use of sulphur in the ordinary manner, and it was found that the apparatus was so cumbersome that it was difficult to transport from house to house, and would also require double time from the fumigator because the apparatus would have to be removed by him at the end of the fumigation. When these various elements were figured on the basis of cost of fumigation per thousand cubic feet, it was found that nothing material would be gained by the use of this particular method.

Quite recently, during the latter part of November and December, 1896, experiments have been in progress with various forms of formaldehyde generators that have been brought to the notice of the DEPARTMENT. None of those, however, that have been presented produces the gas in sufficient quantity to rapidly and completely fill the apartments in which fumigations, by this method, are to be made. It is hoped, however, that it will be possible to find an apparatus producing formaldehyde either by the combustion of methyl alcohol, or by the direct dissipation of formalin from solutions of this substance, that can be shown to be of sufficient utility and of sufficiently easy manipulation to be used by the fumigators of the DEPARTMENT. Several kinds of apparatus are still under test but no definite decision has yet been made as to their value, or as to whether they will be introduced into the work or not.

EXAMINATION OF EMBALMING FLUIDS.

In accordance with the ordinance regulating embalmers and undertakers, it has devolved upon the laboratory to inspect embalming fluids and to determine their germicidal efficiency. The standard, as required by ordinance, is bichloride of mercury solution, one ounce to the gallon of water. It was therefore necessary to compare the germicidal efficiency of such fluids examined with this standard. The method that was used was to make dilutions of the embalming fluid in question, and also dilutions of a standard solution of bichloride and to treat similar cultures with the dilution. The cultures used were in the form of the usual tube cultures of agar and also bacterial suspensions in bouillon. The time of contact was uniformly four hours, at the end of which transplantations were made into sterile

bouillon. Bouillon was used in these experiments because of the wide dilution that the chemical agents in the embalming fluids would have, thus avoiding any possibility of hindering the possible growth by transferring the embalming fluid in sufficient quantity into the culture medium. The efficiency of the embalming fluid in preserving a body does not depend so much upon its high germicidal power as upon the method and the care of making the injection, and in the hands of those having the average embalmer's skill, complete impregnation of a dead body is seldom accomplished. It is, therefore, very advisable that all fluids used should have a high germicidal power that they may be relied upon to stop decomposition, as far as it has been possible, or as far as the particular injection may have been made. One of the chief difficulties with fluids of great germicidal efficiency is that albumen is coagulated, or that they combine with it, forming compounds of less efficiency. Arsenic is the chief constituent of many well-known embalming fluids, yet arsenitis sodæ is of low germicidal efficiency, it being tabulated as I:III. Its value seems to lie in the fact that it does not combine readily with tissue albumin, and can therefore be injected to greater completeness than fluids containing mercuric chloride or formalin. Formalin has been receiving extended trials by undertakers. Its efficiency is undoubted, but the irritating nature of the formalin vapor is so great that undertakers find it inconvenient to work with it.

The inspection of these fluids has been productive of much good, because considerable fraud is practiced, and the undertaker has no means of determining the composition or the strength of the fluid sold him.

The table appended is illustrative of the method of conducting the experiments to determine efficiency:

DEPARTMENT OF HEALTH, CITY OF CHICAGO.

BACTERIOLOGICAL LABORATORY.

RESULT OF EXAMINATION OF EMBALMING FLUID NO. 1480.

SOURCE OF SAMPLE BROUGHT TO LABORATORY BY H. B.

EXAMINATION BEGUN MAY 5, 1896, COMPLETED MAY 13, 1896.

| | CULTURES OR EXAMINATION MADE. | RESULT—BACTERIA FOUND. |
|---|--|---|
| 1 | <i>a.</i> Applied fluid presented direct to agar streak culture of <i>B. mesentericus vulgatus</i> , 12 hours application..... | After two days' incubation transplantations remained sterile. |
| | <i>b.</i> Same as in <i>a</i> , 24 hours application | Transplantation remained sterile. |
| 2 | <i>a.</i> Applied fluid 1 in 10 of water to agar streak culture of <i>staph. pyo. albus</i> , 12 hours application | Transplantations showed growth of <i>S. pyo. albus</i> . |
| | <i>b.</i> Applied fluid 1 in 10 of water to agar streak culture of <i>B. mesentericus vulgatus</i> , 12 hours application..... | Transplantations showed growth of <i>B. mesentericus vulgatus</i> . |
| 3 | <i>a.</i> Applied fluid 1 in 10 of water to agar culture of <i>B. anthrax</i> (no spores)..... | Growth of <i>B. anthrax</i> . |
| | <i>b.</i> Same, <i>B. mycoides</i> | Growth of <i>B. mycoides</i> . |
| | <i>c.</i> Same, <i>B. fluorescens liquefaciens</i> | Growth of <i>B. fluorescens liquef.</i> |
| | <i>d.</i> Same, <i>B. mesentericus vulgatus</i> | Growth of <i>B. mesentericus vulgatus</i> . |
| | 48 hours application in each case. | |

CONCLUSIONS: This embalming fluid in full strength is germicidal in 12 hours. Diluted 1 in 10 it is not, even when allowed to act for 48 hours. It has not the strength of mercuric chloride, 1 ounce to the gallon of water.

EXAMINATIONS OF SUSPECTED HYDROPHOBIA.

In a number of instances the laboratory has been called upon to examine dogs that were supposed to be suffering from hydrophobia. Five instances of this kind have been thus far presented, but none of these proved to be true cases

of hydrophobia so far as could be shown by the examinations made. The usual difficulty encountered is that the body of the animal is brought to the laboratory some days after it has been killed. It has been attempted, by extending information regarding the necessary method of procedure through the police departments and the newspapers, to obtain such animals in better condition, and it may be said that those more recently received have been satisfactory so far as the necessity of the examination required. Suspected animals, dogs, cats, should be killed and transferred to the laboratory at once, or the laboratory should be notified and competent persons will be sent to destroy the animal and to obtain the needed specimens.

The procedure in the examinations made was to remove, by sawing through the vertebral laminae, a piece of spinal cord near its upper part. This is at once macerated with water into a fine emulsion, and a small quantity is injected either subcutaneously or into the anterior chamber of the eye of a rabbit. In none of the injections so far made was there the slightest pathogenic result noticed. This only tends to show that many of the dogs supposed to be mad are suffering from other conditions, or have been worried until they are in a condition of unusual excitement. In one instance the condition reported showed that the dog was a strange animal in the neighborhood, and that while the children were playing with it the mother brought some bread and meat to give the children, and as they were receiving it the dog stood by, when suddenly it grabbed one of the smaller children by the leg, dragged it some distance under the sidewalk and would not release the child until it was struck a heavy blow on the head. It is presumed that the dog was so famished from not receiving food that when it was in plain view the action was of forced occurrence.

Relation of the Medical Profession to the Water Supply of Chicago :
With Especial Reference to the Sanitary Waterway
and Main Drainage Channel.*

BY F. W. REILLY, M. D., ASSISTANT COMMISSIONER OF HEALTH.

THE history of the efforts to secure a pure water supply for Chicago is inseparably connected with that of the medical profession of the city. Forty-seven years ago Dr. N. S. DAVIS arrived in Chicago in the height of the cholera epidemic of 1849. Before the epidemic was over he had traced the relation between the greater incidence of the disease in certain localities and the use of water from surface wells and at once began an agitation for pure water from the lake. During the summer of 1850 he delivered a course of lectures on the sanitary conditions of the city and pointed out the means for their improvement. The plans he then suggested for a pure water supply and for its necessary complement—the proper disposal of the sewage of the city—are the basis of all that was done toward these ends during the subsequent forty years. One immediate result was the passage of an act, February 15, 1851, incorporating the Chicago Hydraulic Company, the foundation of our present system of water supply.

* An Address made by invitation before the Chicago Physicians Club, November 30, 1896.

Only the merest mention may be made of those who followed the initiative of Dr. DAVIS and persistently pointed out the evil effects of impure water and urged measures for preventing the pollution of our source of supply. The roll would include the name of almost every man prominent in the profession in the early days—BRAINARD, EGAN, MCVICKAR, BOONE, PAOLI, ROSS, LYMAN, HOLMES, BYFORD, HOLLISTER, and their colleagues, among whom may be especially noted Dr. JAMES VAN ZANDT BLANEY—who, while the writer was an assistant in his laboratory in “Old Rush” in 1855–56, made the first chemical analysis of Lake Michigan water—Dr. HOSMER ALLEN JOHNSON, subsequently a sanitarian of national reputation, and Dr. EDMUND ANDREWS, whose report of the erysipelas epidemic of 1863 was a scathing indictment of the municipal indifference which had allowed the river to become an open cesspool, with here and there an independent pollution, which he describes with grim humor, as answering “every purpose for the increase of medical practice in general and of erysipelas in particular.”

To no other member of the medical profession, however, if to any other citizen, does Chicago owe so much in this connection as to the late Dr. JOHN H. RAUCH. Indefatigable as were his labors in the cause of medical education and far-reaching as were their results during his lifetime, his efforts toward the solution of the sanitary problems of Chicago were of even greater and more direct importance to the prosperity and the health of this community. The work that he did lives after him in the parks and boulevards of the city—a direct result of his monograph on *Public Parks: Their Effects Upon the Moral, Physical and Sanitary Conditions of the Inhabitants of Large Cities, with Especial Reference to Chicago*. It lives after him in the suburban cemeteries which now receive the city's dead without offense or menace to the living—the result of a paper read before the Chicago

Historical Society in 1858, entitled, *Intramural Interments in Populous Cities and Their Influence Upon Health and Epidemics*. His work lives after him in the present drainage and sewerage system which he so persistently urged and concerning which, in his report as Sanitary Superintendent to the Chicago Board of Health in 1869—when the average death rate for twenty-five years had been more than thirty in the thousand—he wrote as follows :

“From the results of drainage and other sanitary measures carried on in this city, it may be inferred that the judicious expenditure of money for sanitary purposes is a sound maxim of municipal economy, and, from past experience, I am satisfied that the mean annual death-rate can be reduced to 17 per thousand by continuing in force the present sanitary and drainage regulations, thereby making Chicago one of the healthiest cities in the world.”

In his presidential address before the American Public Health Association he cited this prediction, together with other passages from his reports and papers, with the following comment :

“I introduce these quotations simply to show that sanitary science has made sufficient progress at the present time to admit of the supreme test which science falsely so-called can never endure—that of verification by subsequent experience.”

Dr. RAUCH fortunately lived to see the verification of his prophecy “by subsequent experience.” The year before his death, in March, 1894, the mortality rate of the city was only 16.9 per thousand of its population—a fraction less than that which he had asserted, twenty-four years before, was attainable if the plans originally formulated by Dr. DAVIS in 1850 should continue to be carried out.

And RAUCH, too, was a prophet not without honor—save among his own people !

BASIS OF THE SANITARY WATERWAY AND MAIN DRAINAGE CHANNEL.

He lived, however, to see also the fruition of his efforts for the protection of the water supply of the city in the advanced stage of work on the great sanitary waterway and drainage channel. In his annual report for 1869 he foreshadowed, in a general way, the plan now in progress for the ultimate disposal of Chicago sewage and consequent protection of the water supply, and from that time until work on the sanitary waterway was actually begun he continued to accumulate facts and present arguments which were finally successful.

Probably no other one demonstration had more weight in determining the adoption of the present plan than that developed in the study and collation of the results of Professor J. H. LONG'S analyses of the sewage contents of the Illinois and Michigan canal and of the waters of the Illinois river as far south as Peoria, made in the summer of 1886.

These analyses were part of a plan projected by Dr. RAUCH, and carried out under the direct supervision of the writer, for an investigation of the water supplies of the State, with especial reference to the progressive decomposition of sewage in running streams, first between Chicago and St. Louis and subsequently in other Illinois water-courses.

The collation of Prof. LONG'S analyses between Bridgeport and Peoria enabled me to show that more than one-half the sewage pollution of the canal disappeared before reaching Lockport; nearly one-third of the remainder was lost in the next four miles, or 33 miles from Bridgeport; while at Channahon, 48 miles from the city, no trace of sewage was detected. These results were so unlooked-for that Dr.

RAUCH hesitated to accept them. Water analysts had asserted that the self-purification of a polluted stream was impossible—as one phrased it, “no river in the world is long enough to purify itself after it has once been contaminated with organic matter.” In his article on “Water,” in the *Reference Hand Book of the Medical Sciences* (Vol. VII, p. 714), that distinguished authority, Surgeon CHARLES SMART, U. S. A.—with whom the writer was associated, together with Deputy Surgeon-General JOHN S. BILLINGS, U. S. A., and Col. GEORGE E. WARING, Jr., in the sanitary regeneration of the city of Memphis after the terrible yellow fever summer of 1878—Dr. SMART makes the following comment touching the results of this collation and the statements based thereon :

“These statements would be of immense importance were they sustained by collateral evidence; but, unfortunately, those analysts who have had much practical experience in following the track of sewage in its passage down stream will recognize in these results: 1. The analysis of a fresh and turbid sewage at the starting point, the solid particles of organic matter giving a high rate of impurity. 2. The analysis of a partly sedimented sewage as those particles disappear from the water. And 3, the dilution effected by the Desplaines river.”

To this I felt constrained to make the following reply in the *Preliminary Report to the Illinois State Board of Health on the Water Supplies of Illinois and the Pollution of its Streams*, April, 1889:

“For the benefit of ‘those analysts who have had much practical experience in following the track of sewage in its passage down stream’ it should be stated that: 1. The analysis itself, showing 12.6 parts of free ammonia per million, is that of anything but ‘a fresh and turbid sewage at the starting point’; on the contrary it is a sewage in an advanced stage of decomposition. 2. ‘Sedimentation’ in a current with the velocity of that in the Illinois and Michigan

canal is a physical impossibility, and this entirely apart from the influence of the passage of boats. 3. It is expressly stated in the text quoted by Dr. SMART that there was 'no dilution of the contents of the canal,' which contents were the sole subject of the various analyses at Bridgeport, Lockport and Joliet; as a matter of fact the Desplaines river above the point of junction with the canal had ceased to exist as a watercourse during the period under observation—which was one of unprecedented drought—and the contents of the canal were undiluted from any source after leaving Bridgeport."

The demonstration and its deductions where of such obvious—such "immense importance," to borrow Dr. SMART'S phrase, that the analyses were repeated in the winter of 1886-7, again in the summer of 1888 and still again in the spring of 1889, with substantially similar results in every case.

In 1892 Professor PETTENKOFER caused a similar investigation to be made of the River Isar, which receives the sewage of Munich. Within a mile below the point at which the Isar receives the Munich sewage the *beggiatoa*, or sewage fungus, was found growing in abundance; it was still found at Ismaning, between seven and eight miles below, but the last traces were found at Garching, ten miles below Munich. After a ten or twelve miles' flow the Isar so far purifies itself from sewage that its waters no longer support the *beggiatoa*. The chemic analyses gave similar results, while PETTENKOFER himself reports that he found 198 000 bacteria to the cubic centimeter at the mouth of the sewer and only 3600 at Freising, twenty miles below. He distinctly asserts that sewage is decomposed in running streams and is rendered harmless in a few miles' flow.

It may be added that bacteriologic investigation fully supports Professor LONG'S chemic analyses and the combined chemic and bacteriologic examinations of Professor

PETTENKOFER. Dr. ADOLPH GEHRMANN, Director of the City Laboratory, who has probably done as much practical work in water bacteriology as any other man in the United States, made a special study of these waters from the south branch of the Chicago river to a point just below Peoria during September, 1894. One of the chief objects of his study was the typho-coli group of bacilli. The difficulty, thus far unsurmounted, of identifying the Eberth bacillus in the water supply of any large city lends especial interest to this group. During 1892 Dr. GEHRMANN isolated seven organisms resembling the *B. typhosus*, but each gave some variation from the typical, either in growth on potato or as to gas production. As a result of this study and of the work in 1894, under the direction of your Chairman, Dr. REYNOLDS, then Commissioner of Health, Dr. GEHRMANN found that, while the bacilli of this group will live in sewage-contaminated water a variable time, the evidence is that they do not tend to multiply in such water, but disappear after a longer or shorter period. He found them in the sewage contents of the Illinois and Michigan canal and in the Illinois river at every point between Chicago and Peru. At Hennepin they had entirely disappeared and were not again detected anywhere below that place until after Peoria was reached. They were not present just above the city, but were found in abundance just below, after the river had received the Peoria sewage and drainage. At Lockport the specimens showed 930 000 bacteria, including the *B. coli communis*, in each cubic centimeter; at Henry the number had diminished to 5500 per cubic centimeter, with none of the coli-typhoid group present.

In short, it may be accepted as an axiom that running streams tend to purify themselves; they always have done so and will continue to do so when not too highly charged with organic matter; that is, charged beyond the powers of the bio-chemic processes continually operating in nature—

the action of sunlight and oxygen and of the inconceivable myriads of micro-organisms that live on organic matter, break it down and finally leave it inert and innocuous. This might have been argued *a priori*, but for the dogmas of the earlier water analysts, who, for years, based all their conclusions on the results of chemic determinations to the exclusion of the bacteriology.*

*In the London *Lancet* of December 5, 1896, received a fortnight or so after this paper was read, there appears a report of its Special Commissioner on *The Utilization of Micro-organisms in the Purification of Sewage*, an interesting description of a process for the satisfactory disposal of sewage by means of a "septic tank," as it is called by its inventor, Mr. DONALD CAMERON, the City Surveyor of Exeter, Eng. In brief, the "septic tank" is so constructed as to be deprived of light and almost deprived of air. In this tank the anaerobic microbes in the sewage "increase at a fabulous rate and therefore the organic matter is attacked with extraordinary energy and promptitude." Leaving this "septic tank," the liquefied sewage flows through an aerating trough, where it receives a maximum of air and light, resulting in the destruction or quiescence of the anaerobic organisms and the activity of the aerobic microbes, whose function is further increased during the passage of the liquid through filters of highly porous materials, operated intermittently so as to renew their supply of oxygen. Analyses show that the filtrate contains only one-fifth the minimum organic nitrogen that the Rivers Pollution Commission allows. Contrasting this process with the attempts to purify sewage by purely chemical treatment the *Lancet* Commissioner says:

"The theory dominating this construction is based on the principle that nature unaided will deal, and has dealt, with sewage where its powers are not overtaxed. The world did exist before sewers were built and, though in rural districts sewage was used for manure, the larger towns poured their raw sewage into the nearest streams. Nevertheless, the rivers remained pure, or, rather, they were able to purify the impurities they received so long as the country was not too thickly populated. * * * When the methods nature employs to destroy and disperse organic matter were not known, it was difficult, indeed impossible, to purposely provide what was necessary to favor the natural processes. Now, however, we know that the decomposition of organic matter is due to the successive action of various families of micro-organisms. They first feed on organic matter, convert it into a simpler form, and then poison themselves by their own product. They give place to another race, which in its turn feeds and prospers on what their precursors have left, till at last the solids of sewage are broken down by many operations and races of microbes following one upon the other with beneficent and wondrous rapidity."

A week later, December 12, 1896, the *British Medical Journal* published an abstract of a paper read at the Institution of Civil Engineers on *The Bacterial Purification of Water* by Dr. PERCY FRANKLAND and of the subsequent discussion. Following are a few passages from the *Journal's* abstract: "The 'self-purification' of river water, a factor which he [FRANKLAND] had previously treated sceptically, he seemed to accept owing to the rapid strides which have been made in bacteriology. * * * Insolation was spoken of as an important factor, newly recognized; and to the value of sunlight more than one of those who spoke in the discussion bore testimony. * * * Sedimentation and dilution were mentioned as factors of importance, and Dr. Frankland gave many important details by way of example. * * * He suggested also that dilution with purer water was a factor which contributed largely to 'self-purification,' so called, and indeed was seldom altogether absent from any examples."

Messrs. FRANKLAND *et al* seem to have now arrived at the conclusions reached in 1886 through the investigations of the Chicago sewage flow in the Illinois and Michigan canal and the Illinois river.

UNFOUNDED FEARS OF ST. LOUIS AND THE VALLEY.

A prolonged study of the composition of Chicago sewage finally led to the conclusion that a dilution of 20 to 1 in a stream of a velocity of one and a half miles an hour would be sufficient to cause a disappearance of pollution in a flow of less than twenty miles. It is upon this theory that the dimensions of the drainage channel are based.

It has been recently announced from St. Louis that the Eberth bacillus has been found in water taken from the mouth of the Illinois river at Grafton, and that it was positively identified—probably by tag or label—as a genuine Chicago product. Our professional brethren in that city who are moving heaven and earth, including the Federal Government, to stop our drainage channel lest the Chicago bacteria affect those which they themselves propagate, and our colleagues in the Illinois Valley, who are concerned lest the Illinois river be affected as a source of water supply, should pluck up heart of grace from the before-cited demonstrations.

The contribution of the Illinois river to the drinking supply of St. Louis *via* the Mississippi will, after the drainage channel is in operation, be incomparably better than it is now. As for the Illinois itself, its waters are naturally not potable and have long since been abandoned by many of the valley towns as a source of water supply. Its sources are largely in marshy areas, whence it becomes highly charged with organic matter; it is malarious, readily stagnates, and has scarce enough free oxygen to support fish life. With the contribution, through the drainage channel, of from 300 000 to 600 000 cubic feet of water per minute, chiefly from Lake Michigan with its excess of oxygen, not only the navigable and economic, but the sanitary conditions of the river will be immensely improved. Mr. L. E. COOLEY, who has already addressed the Club on this subject, recently suggested to the

writer that the profitable disposal of sewage may, after all, lie in this direction. Fish will not live in the Illinois above Morris, 60 miles from Chicago, nor for 20 to 30 miles below Peoria—beyond which distances the stream purifies itself so that fish are again found. U. S. Fish Commissioner BARTLETT reports that in 1893 eleven million pounds of fish were taken from the other stretches of the river—a more profitable crop, as Mr. COOLEY puts it, than any garnered from the prairies of the State, acre for acre.

Section 20 of the *Sanitary District Act* reads as follows:

“Any channel or outlet constructed under the provisions of this act, which shall cause the discharge of sewage into or through any river or stream of water beyond or without the limits of the district constructing the same, shall be of sufficient size and capacity to produce a continuous flow of water of at least two hundred (200) cubic feet per minute for each one thousand (1000) of the population of the district drained thereby; and the same shall be kept and maintained of such size and in such condition that the water thereof shall be neither offensive nor injurious to the health of any of the people of this State; and before any sewage shall be discharged into such channel or outlet, all garbage, dead animals, and parts thereof, and other solids shall be taken therefrom.”

It will be noted that the degree of dilution shall not be less than 200 cubic feet per minute for every 1000 inhabitants, and it *must* be as much more as is found to be necessary to keep the waters of the channel in a condition “neither offensive nor injurious to the health of the people of the State.” Furthermore, all solid animal or vegetable matter shall be taken out of the sewage before it is discharged into the channel. With these conditions maintained it is believed that fish will live in its waters throughout, except at sewer mouths or in the vicinity of special pollutions. It is certain that they will be restored to the full length of the Illinois river, to convert the wastes and refuse of every town upon

its banks into a palatable and profitable food crop, thus furnishing an ideal solution of one of Chicago's sanitary problems—the prompt and inoffensive disposal of its sewage and the consequent protection of the purity of its water supply.

Certain squeamish individuals, with highly imaginative stomachs, have objected to this proposition as nauseating. But wherein does the conversion of waste organic matter into finny food differ from its conversion into vegetable food? These very persons are among those who strenuously and obstructively labored for the disposal of our sewage by broad irrigation and sewage farming. Yet plant life fed upon sewage is not less a scavenger of earth than is fish life of water.

ALTERNATE PLANS FOR THE DISPOSAL OF CHICAGO SEWAGE.

I was asked to say something to-night about the alternate plans for the protection of the water supply from sewage contamination and about underground water supplies.

Only two other plans have received serious consideration—one for the construction of a huge tunnel out into Lake Michigan off Hyde Park, into which all the sewage of the city should be gathered and discharged on the bottom of the lake. This monstrous proposition, it is hardly necessary to say, was *not* conceived by a Chicago physician. It was seriously advocated, however, by a prominent Eastern engineer who was imported to tell us what to do to be saved. Thousands of dollars were spent in attempts to show its feasibility and it was finally abandoned only when its minimum cost was seen to be at least \$37 000 000, with an annual expense of two and a half millions more for maintenance. Its monstrous character will be better appreciated when it is known that the relatively few lake-emptying sewers now discharge an equivalent of 1500 tons of solid organic matter into the

lake every year, and this has already covered the lake bottom with a bed of filth to an undetermined distance from the shore—analyses made last month, October, show traces of its pollution twelve miles east of the Chicago-avenue pumping station.

The other project was for land disposal of the sewage by filtration and irrigation. This was also abandoned after prolonged study and expensive investigation. Its minimum cost was estimated at \$58 000 000 with fixed charges of \$3 000 000 per annum, and it would, further, have required the consent of the State of Indiana, since the nearest suitable body of land extends into that State. The Commission, appointed in 1886, spent a year's time and between \$70 000 and \$80 000, chiefly in efforts to find arguments for the recommendation of one or the other of these projects, but was finally and reluctantly compelled to take up the plan already well digested and generally approved by Chicago physicians.

Such adverse criticism of this plan as is still met with is generally found, on examination, to be due to misconception of its character and purpose. Its essential purpose is to keep Chicago's sewage from polluting Chicago's twenty-odd miles of lake frontage and the lake itself, from which Chicago's water supply is drawn. This is a sanitary necessity even though every drop of Chicago's drinking water should be filtered or otherwise purified—as it will have to be unless relief is speedily afforded through this channel and its essential complement, the intercepting sewers. In character, it is a new tributary of the Illinois river, with a less degree of organic impurity than any other of its tributaries, and destined to materially improve the sanitary conditions of the entire Illinois valley—the “great malaria preserve” of the State, as it has been called.

CHICAGO'S UNDERGROUND WATER SUPPLIES.

There is not so much to be said to-night concerning the underground water supplies as there seemed to be when the subject was first talked over with your Chairman, who was, as he expressed it, "fascinated with the idea."

In the winter of 1885-86 I thought I had made a very valuable discovery. Mr. COOLEY, Mr. OSSIAN GUTHRIE and myself, as a sub-committee of the Main Drainage and Water Supply Committee of the Citizens' Association, appointed to investigate and report upon measures of relief for conditions which were even worse than the present, had submitted in September, 1885, our joint report embodying the three essential features of the project now being prosecuted. We were, however, still independently pursuing our investigations in search of pure water.

Late in the fall of that year, 1885, my attention was attracted to the wells sunk into the fissured Niagara limestone, which underlies the city, covered by a blanket of impermeable blue clay, and the study resulted in the publication of a series of articles, the first of which appeared in the *Morning News* of January 27, 1886.

A recently published communication from Gen. SOOY SMITH, one of the newly appointed Water Commission, in which he now advocates the same views, led me to look into the matter again and I have materially modified the enthusiasm with which I once urged the substitution of vertical tunnels, a few hundred feet deep into the unpollutable underground supplies, for the horizontal tunnels of two to four miles long out into the lake.

Briefly stated, there are three water-bearing strata under Chicago; first, the fissured Niagara limestone, reached at a little over 100 feet from the surface and having a depth

of about 700 feet; second, the St. Peter's sandstone, immediately beneath, with a thickness of about 200 feet; and third, the Potsdam formation, separated from the St. Peter's by a non-water-bearing stratum some 300 feet thick. Wells sunk into the Niagara now furnish about 20 000 000 gallons a day, and as much more is obtained from the Potsdam at a depth of more than 1200 feet. The maximum capacity is, however, probably already reached. The first Potsdam or artesian wells flowed above the surface, but every additional well now affects the level of the existing wells and all now require pumping; this is also true of the shallow or Niagara wells. There still remains the St. Peter's sandstone, which is water-bearing throughout its whole mass, but not, in the opinion of Mr. THOS. T. JOHNSTONE, Engineer of the Sanitary District, in a sufficient degree to render it useful as a source of supply for a large city. Mr. JOHNSTONE, to whom I am indebted for this recent information, suggests, however, that perhaps the St. Peter's might be fed artificially from Lake Michigan by driving shafts into it from the bottom of the lake. It is also possible that the Potsdam would yield more abundantly from a greater depth, though Mr. JOHNSTONE tells me that below 2000 feet the water is too rich in salt to be used for drinking purposes; whilst as to the fissured Niagara he says that "sufficiently extensive explorations only can determine finally whether natural tunnels are available; but the general facts known are not sufficiently encouraging to lead to a belief that useful results would follow." *

* The remainder of this Address is omitted as not being pertinent to the main subject—"The Water Supply of Chicago."

Regulation of the Practice of Midwives.

F. W. REILLY, M. D., ASSISTANT COMMISSIONER.

THERE are upward of a thousand women practicing midwifery in the city of Chicago. Up to December 31, 1896, the DEPARTMENT had located 1023, and doubtless there are others who have not yet been discovered. Until within the past year their practice has been wholly without supervision or regulation, and such attempts toward regulation as had hitherto been made were fruitless. The evils resulting from this condition of affairs had long been recognized, but without seeming hope of remedy.

Certain peculiarly atrocious developments in the winter and early spring of 1896 caused an effort to be made to take advantage of them and of an aroused public sentiment to secure action through the State Board of Health, to which body the following communication was forwarded at its April, 1896, meeting:

DEPARTMENT OF HEALTH, CITY OF CHICAGO.

April 27, 1896.

To the President and Members of the

Illinois State Board of Health:

GENTLEMEN: I beg to submit briefly for your consideration the conditions which confront this DEPARTMENT, with reference to midwives and their practice in Chicago, and to ask of your honorable body such action for remedy of the evils as you may deem feasible and expedient.

It is a growing custom among midwives in this city to prescribe for the serious illness of parturients, to apply instruments and to assume the conduct of other than cases of normal labor without calling on a medical man for assistance or advice. The mortality of mothers and infants is thus unduly increased; puerperal fever follows in the trail of many midwives; and the most frightful cases of malpractice result from their ignorance.

These facts come to light in a minority of cases only, but with sufficient frequency to have led to instructions to withhold the permit for burial in any case where, in the Registrar's judgment, the death was caused by neglect, incompetence or malpractice on the part of the midwife.

The details of a recent illustrative case are herewith furnished:

On Wednesday, March 25, 1896, the husband of Annie Liebelt, living at 31 Jane street, Chicago, sent for Mrs. Susanna Hora, midwife, 663 Milwaukee avenue, to attend his wife during confinement.

The midwife endeavored to "get the child" until 10:30 p. m. without success, and then left the house, saying she would get some medicine and return. She returned with a package containing obstetric forceps, and, after administering some medicine to the patient, proceeded to apply the instrument. After three-quarters of an hour's continuous endeavor to extract the child she discarded the forceps and an hour later the child was born dead.

Before the child was born the husband asked her if she needed the assistance of a physician, to which she replied that she was a doctor herself, and that everything was all right except that the child "was a little high up."

After the child was born she washed and douched the patient, and, in reply to an inquiry, stated that everything was all right, but it would take longer than in other cases for the recovery of the patient, and then departed. When the midwife called next morning she was informed that the patient began vomiting soon after confinement and was unable to obtain sleep, to which she replied, "It is good that she vomits."

Thursday evening the midwife gave the patient some pills, with directions to administer throughout the night. Friday the patient grew decidedly worse, and in the evening a physician was called in who states that he found the patient in a state of collapse, pulse scarcely perceptible, temperature 101 degrees, cold sweat and hippocratic countenance.

Digital examination being painful, he was only able to detect a lacerated cervix and desisted from further procedure in anticipation of her death, which occurred shortly after his visit. The midwife in the meantime had demanded the remaining pills, and these not being forthcoming, she urged that they be destroyed.

When Dr. ——— was advised of the death of the patient, he issued a certificate of death from puerperal fever, but subsequently notified the Coroner. The husband refused to allow a post-mortem and the Coroner dismissed the case—the body being taken to the Bohemian Cemetery for interment.

Meanwhile the HEALTH DEPARTMENT, having incidentally learned something of the facts, instituted an investigation which led to a post-mortem by Medical Inspector Dr. Clausen and Dr. Nahinsky—the latter employed by the husband.

The examination revealed the following conditions:

External Appearances:—Rigor mortis well marked. Beginning decomposition, most marked over lower abdomen and thighs. Dark bluish discoloration over both groins and vulva, also mucous membrane of vagina and perineum. A perforation about one-fourth of an inch in length about four inches from the navel, and on the level of same on both sides—said to have been made by embalmer's trocar. No pelvic deformity to be detected and no laceration of perineum.

Intra-abdominal Examination:—Intestines perforated (obviously by trocar) in various places, two of which perforations were located at junction of sigmoid flexure and the rectum, and were about one-eighth of an inch in length. Marked pathologic changes in the peritoneum found in the pelvic floor behind the uterus. In the *cul de sac* of Douglas a laceration,

with ragged torn edges, was found communicating with the vagina, which readily admitted four fingers. The peritoneum in this vicinity was darker in color and infiltrated, likewise the edges of this laceration. The mucous membrane of posterior and upper wall of vagina and the cervix were lacerated. The uterus was intact and enlarged. Its cavity contained some fragments of placenta and a small quantity of dark clotted blood. Bladder empty and normal and ovaries and tubes normal. Other abdominal organs apparently normal. The infant, well developed and large, presented a dark discolored swelling above and behind each ear, and a linear depression about one and one-half inches on each side of neck, parallel to the upper posterior border of the sterno-cleido-mastoid muscle.*

As a result of the disclosures in this case information was lodged with the attorney of the State Board, Mr. Chas. A. Williams, and the husband retained an attorney, Mr. Jesse Cox, to prosecute the midwife in a civil action for damages.

These proceedings were cut short by the midwife committing suicide by carbolic-acid poisoning, April 11. During the investigation it was alleged by various persons that she had caused the death of a number of other unfortunate parturients—two or three within a short time of the Liebelt case.

According to the Official Register, Susanna Hora had been in practice as a midwife in Chicago some fifteen years—her State certificate having been issued November 1, 1881, on alleged credentials from the University of Buda-Pest, dated July 3, 1875.

While this case has some unusual features, it does not by any means cover all the terrible details of the unrestricted practice of many midwives—the criminal abortions performed by them, their numerous infanticides and frequent butcheries. A recent well-authenticated instance of such butcheries is that of a midwife who amputated an inverted womb after labor for a tumor, in which operation she was “assisted” by a physician holding a State certificate. The prosecution

* Subsequent to this case, a brief search of the records of the Coroner's office was made which disclosed no less than thirty-four recent cases of unfortunate women and girls who had come to an untimely and cruel end through the unregulated practice of midwives. In one the woman was arrested for the third time in seven months for procuring abortion resulting in death. Under instructions she was discharged by the Coroner's jury on the ground, as alleged, that there was “no use in holding her to the Grand Jury, since she had been twice acquitted on trial, although she once admitted in the Criminal Court that she had used the catheter (found on the post mortem) pushed through the uterus and lying in a bed of pus in the omentum.” Close on the heels of this came the arrest of two most notorious abortionist midwives—the post mortem of their victim showing lacerations of the fundus and a perforation through which a loop of intestine had been dragged down, torn apart and its contents filling the cavity. The details of some of the cases are simply sickening—the least offense, but the most frequent, being failure to remove the placenta entirely and consequent death from septic peritonitis.

In only thirteen of these thirty-four cases was there any clue to the operator; but this is of minor importance, since in no case was any punishment inflicted and the women were allowed to continue their nefarious pursuits unhampered by any restriction or regulation. It is obvious, of course, that the midwives' victims who find their way to the morgue and become the subjects of a Coroner's inquest represent but a small number of the total, whose deaths are attributed to other causes—not infrequently through the aid of a certificated physician.

was a failure, because in the absence of the amputated structures it was impossible to prove the non-existence of a tumor. In fact, prosecution in these cases is rarely successful. There are now three licensed midwives in this city under indictments of long standing, and concerning whose guilt there is no shadow of doubt. They are still plying their nefarious vocations unrestricted, except in so far as this DEPARTMENT refuses to recognize their certificates of causes of death. This, however, gives them little or no concern, since they can readily obtain a certificate from a registered physician for a small fee.

Mr. Jesse Cox, the attorney in the Liebelt case, has obtained from your Secretary, Dr. Scott, the statement that "the authority granted under a midwife certificate by this Board confers upon her the right of attendance upon women during labor only, and does not empower her to prescribe medicines for the treatment of any physical ailment. As to the use of forceps in delivery of the child, the Board has never put itself directly on record. I am inclined to think that their use by a midwife would exceed the right granted by the certificate."

It is earnestly requested of your honorable board that the practice of midwives, certificated by the State through you, be clearly defined, and that this DEPARTMENT be advised how it may best assist in restricting their practice within such definition.

It is believed that the better class of midwives—and there are many useful and reputable women engaged in this business in Chicago—would be glad of such action by the Board, since it would have the effect of driving the procuresses, abortionists and she-butchers out of their ranks, and so make the legitimate practice of midwifery more respectable.

I have the honor to be,

Very respectfully,

F. W. REILLY, M. D.,

Assistant Commissioner of Health.

Accompanying this communication the following draft of a preamble and resolutions was submitted:

Whereas, The act constituting the State Board of Health of the State of Illinois charges the Board with "the general supervision of the interests of the health and life of the citizens of the State," and empowers it with "authority to make

such rules and regulations * * * as it may from time to time deem necessary for the preservation or improvement of the public health;" and

Whereas, The unrestricted practice of midwifery, by which midwives prescribe for the serious illness of the lying-in, apply instruments, perform grave operations and assume the conduct of other than cases of natural labor, results in a great and avoidable increase in the mortality of mothers and the newly born, to the detriment and injury of the health and life of the citizens of the State:

Therefore, The Board, in regular quarterly meeting assembled in the city of Chicago this 28th day of April, A. D. 1896, does hereby adopt and promulgate the following rules and regulations for the practice of midwifery by midwives licensed in accordance with the Act to Regulate the Practice of Medicine in the State of Illinois, in force July 1, 1887:

Rule 1. A midwife, licensed by the certificate of the State Board of Health, is authorized and empowered to attend cases of natural labor only, and, after such labor, to attend the mother and child under such rules and regulations and medical control or supervision as may be prescribed by the health authorities of the city, town or village in which the midwife resides or practices.

Rule 2. Before such rules and regulations shall be valid and in force, they shall be submitted to the State Board of Health for adoption and approval, and upon such adoption and approval, and their due publication to those interested, they shall have the same force and effect as other rules and regulations of this Board.

Rule 3. Due publication of the rules and regulations shall consist in furnishing one printed copy thereof, by mail or otherwise, to each registered midwife in the respective city, town or village.

Rule 4. Any act of practice—as by prescribing drugs and medicine other than the simple aperients, cathartics and diuretics, or the administration of anesthetics, or the application or use of instruments—in violation of the rules and regulations herein provided for, shall be held to be the unauthorized practice of medicine and surgery as defined in Section 10 of the Medical Practice Act of 1887, and the offender shall be liable to the penalties prescribed in Sec. 12 of said Act.

The Board unanimously adopted and promulgated the foregoing, and, acting thereon, a code of rules and regulations for the practice of midwifery in the city of Chicago was

formulated and submitted to the Board for approval at its next regular meeting, July 7, 1896. This approval was promptly granted, and the following declaration was duly published: *

STATE BOARD OF HEALTH: STATE OF ILLINOIS.

OFFICE OF THE SECRETARY,

SPRINGFIELD, July 9, 1896.

To Whom it may Concern:

WHEREAS, the following Rules and Regulations of the DEPARTMENT OF HEALTH of the city of Chicago, governing midwives in their practice in said city, have been duly approved by the STATE BOARD OF HEALTH at its regular meeting, July 7, 1896, they are hereby declared to have — after their due publication to those interested — the same force and effect as other rules and regulations of this BOARD and the laws of this State.

Witness my hand, this 9th day of July, 1896:

B. M. GRIFFITH, M. D.,

President.

Attest:

JOHN W. SCOTT, M. D.,

Secretary.

The DEPARTMENT code follows, substantially, the lines of the Austrian regulations, which, in a modified form, have been approved and urged for adoption in Great Britain. Printed copies of the code — which follows — were mailed to every midwife whose address was known, and subsequently to every registered physician.

DEPARTMENT OF HEALTH: RULES AND REGULATIONS
FOR THE PRACTICE OF MIDWIVES IN THE CITY OF
CHICAGO. IN FORCE JULY 7, 1896.

UNDER the authority and with the approval of the State Board of Health of the State of Illinois, the DEPARTMENT OF HEALTH OF THE CITY OF CHICAGO hereby prescribes the following rules and regulations for the practice of midwives within its jurisdiction.

* These details are recited for the benefit of other cities and towns in the State that may desire to avail themselves of this authority of the State Board. The rules adopted and promulgated by the Board were so drawn as to enable each municipality to frame its own rules and regulations in accordance with its own conditions of midwifery practice. It is obvious that no uniform code could be made to apply in every detail to all municipalities, but the principles involved will be the same everywhere, and these are set forth in the Chicago code, which may be modified by each municipality for itself.

Wilful violation of any of these rules will be visited by prosecution under Section 12 of the State Medical Practice Act, or by suspension of the right to practice, or by refusal of Burial Permit, according to the gravity of the offense.

RULE 1.—MIDWIVES DEFINED: No person shall practice midwifery in the City of Chicago unless authorized so to do by the State Board of Health of the State of Illinois. If authorized to practice only midwifery the certificate of said Board conferring such authority shall be kept in view in the office or reception room of the midwife for the information of those seeking her services and for the inspection of the proper city officials. For the purpose of these Rules and Regulations all such persons, duly authorized to practice only midwifery shall be known as midwives, and none other.

Rule 2.—MIDWIVES MUST REGISTER: Within thirty (30) days after the approval of these Rules and Regulations by the State Board of Health and their due publication to those concerned, every midwife then engaged in the practice of midwifery in the City of Chicago shall register her name and address with the Medical Inspector of Midwifery, and shall show to said Medical Inspector her certificate from the State Board of Health. And thereafter no midwife shall engage in practice in Chicago until she has so registered, and she shall notify the inspector of any change of her address within ten (10) days after such change.

Rule 3.—TO ATTEND NATURAL LABOR ONLY: Midwives shall attend cases of natural labor only. In any case which is not "natural," as hereinafter defined, the midwife shall at once tell the family that the assistance of a physician is necessary. The family shall be asked to choose the physician; but, if too poor to pay, the midwife shall immediately send for the nearest DEPARTMENT physician. A list of DEPARTMENT physicians, who will assist in such cases without pay, must be kept by every midwife. The list may be obtained from the Medical Inspector of Midwifery.

"Natural labor" is hereby defined to be one which occurs at or near term (nine calendar months); one in which the head and no other part presents; and one in which there is none of the conditions specified in the following:

Rule 4.—WHEN THE PHYSICIAN MUST BE CALLED: A midwife must seek the assistance of a physician in any of the following conditions:

During Pregnancy—

When she has discovered or suspects a narrow pelvis.

When there is hemorrhage (bleeding).

When the patient is threatened with an attack of any illness of a serious nature.

When a pregnant woman dies suddenly.

During Labor—

- In all cases of unnatural position of the child, and, if possible, before the liquor amnii escapes (the "bag of waters" breaks).
- In presentations of hands or feet or when the cord presents with the head.
- In every case where, from the smallness of the pelvis or largeness of the child's head, or from any other cause, the descent of the head is interfered with.
- In disturbance of the labor pains leading to delay of birth, or in cases of excessive pains followed by exhaustion, or where a child whose head has already deeply descended is not delivered for two hours after the opening of the mouth of the womb and the escape of the liquor amnii.
- In bleeding, at whatever time in the labor it may occur.
- In presenting placenta ("afterbirth").
- If the afterbirth be not expelled within an hour after the birth of the child, even if no bleeding has occurred.
- In all cases of rupture or tear of the perineum, as soon as such occurs.
- In all cases where abortion or premature labor is threatening or has occurred.
- In twins or multiple births, when there is delay of more than half an hour between the deliveries, or when there is any complication and in all monstrosities.
- In all cases of apparent sickness or threatened danger, as well as on the sudden death of the woman.
- In the apparently dead newborn child.
- In all cases of stillbirth, no matter what the stage of development of the child.

During Childbed—

- In the lying-in woman when there is a rise of pulse or temperature (101°F. or over), rigor or chill, tender abdomen, stoppage of the lochia (discharge) or bad smell of the same.
- In all cases of illness of the newly-born child, and especially if the eyes show redness or other signs of inflammation.

When a physician is sent for to a protracted labor the midwife shall, when possible, send a written description in a few words of the cause of the delay, such as "narrow pelvis with head presentation;" "cross presentation;" "hemorrhage during the afterbirth period," and so forth, so that he may at once know what it will be necessary for him to bring.

If a patient or her relations wish a physician called in, even if the midwife does not see any sufficient symptoms, she is not to object or try to persuade them not to do so.

The choice of the physician—except in the case of a DEPARTMENT physician—rests with the patient or her relations, and the midwife is not to express any opinion unless asked to do so.

The midwife must inform the physician truthfully and accurately of all she has observed about the case previous to his arrival, and must stay as long as he wishes, to assist him and conscientiously carry out his orders.

Rule 5. GENERAL DUTIES OF THE MIDWIFE: After assuming charge of a lying-in case the midwife must not leave the patient during the delivery, and must stay with the woman at least one hour after the expulsion of the after-birth in a natural labor. In cases of other labors, or in threatened danger, she must always await the arrival of the physician and remain with the case so long as he thinks necessary and faithfully carry out his instructions.

The midwife shall see to the proper ventilation of the lying-in room and to the keeping of the bed and body linen in a state of thorough cleanliness. She shall be responsible for the cleanliness, comfort and proper dieting of the mother and child during the lying-in period, which in a normal case means the time occupied by the labor and a period of ten days thereafter.

Rule 6. MUST NOT EXPOSE HERSELF TO CONTAGION: No midwife shall visit—much less nurse or attend—a case of chicken-pox, diphtheria, erysipelas, measles, membranous croup, scarlet fever, small-pox, whooping cough, or other contagious or infective disease. If she should, unfortunately, be exposed to such contagion or infection, she shall report the fact to the DEPARTMENT, and shall not attend or visit a lying-in case until she has thoroughly disinfected her person and clothing and has been pronounced safe by the Medical Inspector.

In the case of a lying-in woman contracting childbed fever, or any septic condition whatever, the midwife must not attend any other woman at the same time, nor until it has been pronounced safe for her to do so by the medical inspector.

A midwife must not, under any circumstances, assist in the laying out of dead bodies.

Rule 7.—TO PREVENT CHILDBED FEVER: Midwives must keep themselves and all their appliances scrupulously clean and must avoid contact with sick persons and decomposing substances of every kind, so that their fingers, appliances or clothes may not contain any infective material which might be conveyed to the lying-in woman during examination, and thereby produce puerperal or childbed fever. They are strenuously enjoined before touching a lying-in woman to wash their hands thoroughly with a disinfectant and to disinfect such instruments as they are permitted to use, namely, the clinical thermometer, urethral catheter, injection tubes, umbilical cord scissors.

It is particularly dangerous for a midwife who is attending a lying-in woman, or a sick person where there are foul-smelling emanations, to go direct to another case without first thoroughly cleansing her hands and appliances and changing her clothing.

Unless the cleansing process be thoroughly carried out, even after a healthy confinement, there will be remains of blood and other fluids on the fingers, and especially under the nails, which will there decompose and will be dangerous to the next case attended. The midwife must, therefore, keep her nails cut short, and preserve the skin of her hands from chaps, injuries and indurations or calluses.

Rule 8.—WHAT THE MIDWIFE MAY NOT HAVE OR DO: Under no circumstances shall any midwife have in her possession a set of obstetric forceps or any other instrument for the performance of an obstetric operation: nor any drug or instrument or other article which may be used to procure an abortion or to cause or hasten the expulsion of a foetus, whether at term or otherwise. Nor shall any midwife give chloroform, ether or any other anesthetic, except by the advice and in the presence of a physician. Nor shall any midwife give or advise the use of any drug or medicine, except the simple domestic remedies commonly used in the household.

Any violation of this rule shall be considered as proof that the midwife performs operations and practices medicine in violation of Section 10 of the Medical Practice Act, and is subject to the penalties prescribed in Section 12 of said Act.

Rule 9.—CASE-BOOK TO BE KEPT: Every midwife, in addition to her usual equipment, must be provided with a case-book, in which she shall keep a full and correct record of all cases of labor attended by her. This book shall be subject to inspection by the DEPARTMENT Medical Inspector, and shall be open to the physician (if one is called in), who may write therein, and sign, his own remarks upon the case in hand.

Rule 10.—MUST REPORT BIRTHS: Every midwife shall make and keep a registry of each birth at which she professionally assists or advises; and shall report the facts thereof to the DEPARTMENT OF HEALTH, on the blanks furnished by the DEPARTMENT, within five (5) days after each such birth.

Rule 11.—TREATMENT OF APPARENTLY DEAD-BORN: In apparently dead-born children, at or near term, in whom no sign of putrefaction has developed, the midwife, in the

absence of the physician — who must be summoned at once— should practice the methods of resuscitation taught her, until the child breathes regularly, or for at least half an hour.

Rule 12.—CONFIDENCES OF PATIENTS TO BE RESPECTED: Midwives must conscientiously guard the secrets of their patients and must only divulge them if the law requires them to do so.

With the copy of the foregoing sent to physicians, was a circular-letter from the ASSISTANT COMMISSIONER, in which it was pointed out that the object of the movement is two-fold: “First, to reduce the amount of avoidable suffering, sickness and premature death among the parturient and the newly-born; and, second, to rescue from incompetent hands a class of practice which legitimately belongs to the qualified physician. So far as I know, this is the first effort in this country to regulate the practice of midwives, and its success must depend very largely on the sympathy and co-operation of yourself and other members of the medical profession.

“Under the rules every midwife is required to register with the Health Department and to have her State certificate displayed in her office or reception room; and this certificate must bear the stamp of the Department showing that the possessor is registered. It would greatly help the perfection of the registration if you would favor me, from time to time, with the name and address of any midwife whom you know not to have such stamped certificate displayed as required.

“Of even greater importance is information concerning midwives who violate Rules 3, 4 and 8. The State Board has decreed that midwives shall attend cases of normal labor only, as defined in Rule 4, and shall not attempt any obstetric or gynecologic operation, nor prescribe for any serious illness either of mother or infant. In all such cases it is made her duty to call a physician, and, in order that this shall cause no hardship to the poor who are unable to pay for the services

of a doctor, arrangements are being made whereby such services will be given gratis in all proper cases — that is, where the family is too poor to pay any fee.

“There is, therefore, absolutely no reason, excuse or justification for any midwife usurping the function of the physician. She *must* confine herself to those duties for which she is supposed to be competent and for which only is she licensed. She must leave to the properly qualified physician all obstetric and gynecologic operations, and the medical and surgical treatment of disease and injury—which she does not now do, as a rule.”

The response to this appeal was so prompt and generous that the DEPARTMENT was at once enabled to organize a complete Obstetric Staff from among the obstetricians, gynecologists and pediatricians, who tendered their active services and so made practically operative the provisions of *Rule 3*.

The *personnel* of this Staff at the close of the year is as follows:

OBSTETRIC STAFF OF THE CHICAGO HEALTH DEPARTMENT.

HONORARY CONSULTANTS.

JOHN BARTLETT, M. D.

A. L. CLARK, M. D.

A. H. FOSTER, M. D.

R. LUDLAM, M. D.

E. O. F. ROLER, M. D.

H. B. STEHMAN, M. D.

SARAH HACKETT STEVENSON, M. D.

DEPARTMENT PHYSICIANS.

[The following Obstetricians will respond to the call of any registered midwife (*see Rule 3*) to assist in labor cases occurring in the area defined for each.]

DR. EFFIE L. LOBDELL, 169 Clark street. Express 284.

DR. JOHN M. SLOAN, 264 South Halsted street. Main 159.

Between the River on the north and Twelfth street on south; between the South Branch on the west, and the Lake on the east.

- DR. A. A. BURR, 2036 Indiana avenue. South 644.
Between Twelfth street on the north, and 26th street on the south; between the east side of Clark street on the west, and the Lake on the east.
- DR. FRANK CARY, 2935 Indiana avenue. South 374.
- DR. LESTER E. FRANKENTHAL, 3236 Michigan ave.; S. 657.
Between Twenty-sixth street on the north, and Thirty-third street on the south; between Wentworth avenue on the west, and the Lake on east.
- DR. SHELDON LEAVITT, 148 Thirty-seventh street. Oak 847.
Between Thirty-third street on the north, and Thirty-ninth street on the south; between Stewart avenue on the west, and the Lake on the east.
- DR. C. E. PADDOCK, 2600 Indiana avenue. South 1110.
Between Sixteenth street and the South Branch on the north, and Thirty-ninth street on the south; between Western avenue on the west, and on the east Clark street (Sixteenth to Twenty-sixth), Wentworth avenue (Twenty-sixth to Thirty-third), and Stewart avenue (Thirty-third to Thirty-ninth).
- DR. J. B. DELEE (Lying-in Dispensary). Canal 123.
Between Twelfth street on the north, and the River on the south; between Peoria street (Twelfth to Twenty-second) and Halsted (Twenty-second to River) on the west, and the River on the east.
- DR. F. A. STAHL, 527 South Halsted street. Canal 76.
Between Twelfth street on the north, and the River on the south; between Throop street on the west, and on the east Peoria street to Twenty-second, Halsted street to the River.
- DR. FRANK J. NOVAK, 733 West Eighteenth street. Canal 78.
Between Taylor street on the north, and the River and Drainage Canal on the south; between Western avenue on the west, and Throop street on the east.
- DR. L. H. SIXTA, 947 West Twenty-first street. Canal 416.
Between Twenty-second on the north, and the Drainage Canal on the south; between City Limits on the west, and Western avenue on the east.
- DR. P. T. BURNS, 531 South Leavitt street. West 974.
Between Twelfth street on the north, and Twenty-second street on the south; between City Limits on the west, and Western avenue on the east.
- DR. LAWRENCE RYAN, 1285 W. Van Buren st.; W. 872.
Between North avenue on the north, and Twelfth street on the south; between City Limits on the west, and West Fortieth street on the east.

- DR. W. RITTENHOUSE, 583 Ogden avenue; West 135. Polk and California; W. 475. 975 Warren avenue; W. 184. Between Lake street on the north, and Twelfth street on the south; between West Fortieth street on the west, and Kedzie avenue on the east.
- DR. FRANKLIN C. WELLS, 359 Warren avenue. West 995.
- DR. R. N. FOSTER, 553 Jackson boulevard. West 245. Between Lake street on the north, and Taylor (to Campbell), Twelfth street (to Kedzie) on the south; between Kedzie avenue on the west, and Paulina street on the east.
- DR. FRANK B. EARLE, 535 Washington boulevard. West 149. Between Chicago avenue on the north, and on the south Washington (to California avenue), West Lake to Fortieth street, between West Fortieth street on the west, and Paulina street on the east.
- DR. EFFA V. DAVIS, 516 West Adams street. West 960.
- DR. HARRIET A. RICE, Hull House. West 70. Between Van Buren street on the north, and Twelfth street on the south; between Throop street on the west, and the River on the east.
- DR. E. R. MORAS, 171 Blue Island avenue. Main 4561. Between Lake street on the north, and Van Buren street on the south; between Center avenue on the west, and the River on the east.
- DR. F. A. M'GREW, 291 North Carpenter street. West 1114. Between the River on the north and east, and Lake street on the south, and May street on the west.
- DR. P. H. CONLEY, 477 Grand avenue. West 157. Between Ohio street on the north, and Taylor street on the south; between Paulina street on the west, and May street (to Lake street), Center avenue (to Van Buren), and Throop street (to Taylor) on the east.
- DR. RUDOLPH W. HOLMES, 1216 Milwaukee avenue. W. 987. Between North avenue on the north, the River on the east, Milwaukee avenue on the south, and Ashland avenue on the west.
- DR. W. J. SIEMINOWICZ, 581 Milwaukee avenue. West 981. Between Milwaukee avenue on the north, and Ohio street on the south; between Ashland avenue (to Chicago) and Paulina street (to Ohio) on the west, and May street on the east.
- DR. A. B. OYEN, 807 North Rockwell street. West 906. Between North avenue on the north, and Chicago avenue on the south; between West Fortieth street on the west, and Western avenue on the east.

- DR. KARL SANDBERG, 622 North Hoyne avenue. West 843.
Between North avenue on the north, and Chicago avenue on the south; between Western avenue on the west, and Ashland avenue on the east.
- DR. L. E. LAWSON, 68 Humboldt boulevard. W. 403 and 906.
Between Belmont avenue on the north, and North avenue on the south; between North Seventy-second street on the west, and Kedzie avenue on the east.
- DR. FRANCIS E. THORNTON, 354 W. Belmont avenue. W. 320.
Between Belmont avenue and City Limits north; between Western avenue and City Limits west.
- DR. T. J. CONLEY, 1593 Milwaukee avenue. West 988.
Between Fullerton avenue on the north, and North avenue on the south; between Kedzie avenue on the west, and the River on the east.
- DR. E. I. HOOK, 439 West Fullerton avenue. West 743.
Between Belmont avenue on the north, and Fullerton avenue on the south; between Kedzie avenue on the west, and the River on the east.
- W. H. ALLPORT, 85 Rush street. North 709.
Between Chicago avenue on the north, and the River on the south; between the River on the west, and the Lake on the east.
- DR. J. W. NILES, 390 North Clark street. North 611.
Between Division street on the north, and Chicago avenue on the south; between Wells street on the west and the Lake on the east.
- DR. NORMAN KERR, 111 East Chicago avenue. North 214.
Between Division street on the north, and Chicago avenue on the south; between the River on the west, and Wells street on the east.
- DR. E. D. SMITH, 305 East Division street. North 721.
Between North avenue on the north, and Division street on the south; between Halsted street on the west, and the Lake on the east.
- DR. L. H. PRINCE, 51 Lincoln avenue. North 1144.
Between Fullerton avenue on the north, and North avenue on the south; between Halsted street on the west, and the Lake on the east.
- DR. C. S. BACON, 426 Center street. North 1109.
Between Fullerton avenue on the north, and Division street on the south; between the River on the west, and Halsted street on the east.

- DR. W. D. STORER, 1402 Wrightwood ave. Lake View 35.
Between Addison avenue on the north, and Fullerton avenue on the south; between Racine avenue on the west, and the Lake on the east.
- DR. J. V. BACON, 1216 Diversey boulevard. Lake View 192.
Between Addison avenue on the north, and Fullerton avenue and the River on the south; between the River and Western avenue on the west, and Racine avenue on the east.
- DR. W. H. MARBLE, 733 Grace street. L. V. 15.
Between Addison avenue and City Limits north; between Western avenue (north to Devon avenue), and Kedzie avenue (Devon to limits) on the west, and the Lake on the east.
- DR. H. H. MATHER, 7847 Wright street. Englewood 88.
- DR. A. B. SPACH, 6629 Harvard street. Englewood 147.
Between Sixty-third street on the north, State street (to Ninety-ninth street), Stewart avenue (Ninety-ninth to One Hundred and Third), and Halsted street (One Hundred and Third to One Hundred and Seventh) on the east; between Ninety-ninth street (State to Stewart), One Hundred and Third street (Stewart to Halsted), and One Hundred and Seventh street (Halsted to limits), on the south, and city limits on the west.
- DR. J. J. LARKIN, 227 Ninety-second street. So. Chicago 16.
- DR. D. S. HARVEY, 227 Ninety-second street. So. Chicago 16.
Between Fifty-fifth street on the north, and city limits south; between the Lake and the city limits east, and Stony Island avenue on the west.
- DR. JUNIUS C. HOAG, 4320 Lake avenue. Oakland 155.
Between Fifty-fifth street on the north, and city limits on the south, between State street (to Ninety-ninth), Stewart avenue (Ninety-ninth to One Hundred and Third), Halsted street (One Hundred and Third to One Hundred and Fifteenth) and city limits on the west, and Stony Island avenue on the east.
- DR. S. C. PLUMMER, 4304 Lake avenue. Oakland 982.
- DR. JNO. LYONS, 4118 State street. Oakland 950.
Between Thirty-ninth street on the north, and Forty-seventh street on the south; between city limits on the west, and Halsted street on the east; between Thirty-ninth street on the north, Fifty-fifth street on the south; between Halsted street on the west, and the Lake on the east.
- DR. RUFUS G. COLLINS, 5059 State street. Oakland 123.

DR. P. DOUGHERTY, 401 Garfield boulevard. Wentworth 544.
Between Forty-seventh street on the north, and Sixty-third street on the south; between city limits on the west, and State street on the east. Dr. Collins north of Fifty-fifth street; Dr. Dougherty south of Fifty-fifth street.

DR. J. B. DELEE, 3318 Indiana avenue. South 1056.
Between the Illinois and Michigan Canal on the north, and Thirty-ninth street on the south; between the Canal on the west, and Western avenue on the east.

PEDIATRICIANS.

DR. W. S. CHRISTOPHER, 408 Center street. North 563.
DR. A. C. COTTON, 677 Jackson boulevard. West 314.
DR. ROSA ENGELMANN, 3027 Indiana avenue. South 146.

Dr. ROSA ENGELMANN was originally assigned as Medical Inspector of Midwives, and the success thus far achieved is due chiefly to her energy and professional influence, through which the interest of the above named physicians was enlisted. Owing to the increasing demand for her services as expert intubator and antitoxin administrator, Dr. ENGELMANN was relieved from this duty at the beginning of the diphtheria season, and was succeeded by Dr. GEORGE C. HUNT, Medical Inspector of Hospitals.

Dr. HUNT reports a list of 1023 women found to be practicing midwifery at the close of the year. Of these 773 hold certificates of the State Board of Health, of which class 688 have registered in the Department and are satisfactorily complying with the rules and regulations. Opportunity has not yet offered to compel compliance by the remaining 85 certificated midwives—but this is only a question of time.

Proofs of practice and other evidences of violation of the State Medical Practice Act by the unlicensed midwives (350 in number) are being accumulated with the purpose of presenting them to the State Board of Health as the basis of prosecution under Section 12 of the Act. A number of these have

ostensibly abandoned practice by taking in their signs, refraining from advertising either in the daily press or by means of cards, circulars, etc.

The results attained during these few months are full of promise that, if the work be pursued steadily and judiciously on the lines established, without haste but without rest, the present evils from the practice of midwives will be reduced to a minimum in the near future. An interesting and valuable development of the work in an educational direction is already seen in the organization of the Chicago Obstetric Society by the members of the Obstetric Staff. An address before this society by C. S. BACON, M. D., President of the Obstetric Staff, on "Failures of Midwives in Asepsis," is prefaced by the following general considerations:

The need of this movement, that we now assist in inaugurating, which contemplates the control of the practice of midwives, is generally acknowledged. The credit for its origination belongs to ASSISTANT HEALTH COMMISSIONER Dr. REILLY. It is the first practical and promising attempt in America to regulate midwife practice. I believe that we, the members of the Staff, have an unusual opportunity to do a valuable service to the community.

Our work is humanitarian and based upon humanitarian motives. I believe that the chief consideration that induced each of us to enter into this work was that of benefiting the community. No doubt the legitimate desire to enlarge our experience through the observation of unusual and interesting cases had its influence on all of us, as well as the advantage to be gained through association with others interested in the same specialty. Yet back of all was the fact which our observation and experience have shown to exist, that the health and lives of many helpless and innocent people are jeopardized through the illegitimate practice of midwives. Just as the medical profession is always ready to unite in any well-digested effort to stamp out or prevent an epidemic of disease, so, when once a chance was given us, we were all ready to engage in the effort to reduce the well-recognized dangers to which thousands of poor women are exposed through the unrestrained ignorance of their attendants during childbearing, as well as through their unlawful practices to interfere with pregnancy.

These remarks do not imply that our attitude is one of hostility toward the midwives. On the contrary, it is our aim to assist them in their legitimate work. There are about 1000 midwives in Chicago, and they attend from 20 000 to 25 000 cases of labor annually.* Moreover, a large share of our population is composed of immigrants from Europe who are accustomed to employ midwives. If it were desirable to do away with midwife practice it would be absurd to attempt a thing so impracticable. But it is not desirable. A well-trained midwife can care for a poor woman and her child in a case where the employment of a nurse is an impossibility, better and much more cheaply than a physician. If she confines herself to her proper duties, and if she be trained to perform them and to recognize when she should call for assistance, she is a valuable member of the community.

The objections to midwives are that they are ignorant, especially of the principles and practice of asepsis, that they are prone to usurp functions not belonging to them, and that they often advise and produce abortions. It is the especial object of this movement to correct the abuses in their practice. In the June Report of the Health Department Dr. REILLY calls attention to the criminal practice of midwives, and mentions the fact that the recent records of the Coroner's office show thirty-four cases of deaths of unfortunate women and girls from this cause. If in so many cases the responsibility is fixed, how many cases are there where the responsibility is unknown? A recent investigation of the puerperal mortality statistics of Chicago† shows that during the last ten years abortion has been assigned as the cause of death 161 times. This does not include cases of death assigned to uterine hemorrhage, septicemia, etc., which, as we know, often result from abortion. It is probable that a great many of these deaths were due to criminal practice. How many were performed by midwives we have no means of knowing, since the physicians called in and in attendance at the death issue the certificates. The common observation of all of us, and the facts just cited from the Coroner's report, show to what an extent the mortality depends upon criminal midwife practice. We must also remember that not only the great

* "The average mortality in childbirth is about 1 in 200, but it is found that in the cases undertaken by such *trained midwives* as are employed in lying-in hospitals the mortality is only 1 in 600." [HAVELOCK ELLIS, *The Nationalization of Health*, p. 142.] This is the end sought for by this attempt to regulate the practice of midwives—a two-thirds reduction of the perils of maternity; an annual saving of from 150 to 160 lives of young mothers, "among the most valuable to the community," in the practice of Chicago midwives.—F. W. R.

† See "The Mortality from Puerperal Infection in Chicago," by C. S. BACON, *Amer. Gyn. and Obst. Journal*, April, 1896.

mortality is due to this cause, but a vast amount of sickness likewise results. It is one of the most important objects of this movement to stamp out this criminal practice. In none of the thirty-four Coroner's cases was any punishment inflicted on the perpetrators of the crime. Our criminal laws can therefore have little or no effect in preventing the continuance of these crimes. The rules and regulations which will control midwife practice in the future provide that under no circumstances shall any midwife have in her possession any drug or instrument or other article which may be used to procure an abortion. In the enforcement of this provision, as well as in those regulating the scope of their practice, we hope to see these crimes abolished.

Midwives usurp the functions of physicians not only by performing obstetric operations, but also by trying to treat and manage medical and surgical cases. The law-makers of all the States are gradually coming to recognize the importance to the community of a well-educated and well-trained medical profession, and are insisting upon a four years' special training based upon a thorough preliminary general education, as a requisite to a license to practice. We all know the necessity for a thorough training in anatomy, physiology and bacteriology to a comprehension of the principles of surgery. How then can a woman of limited education in four to six months learn to appreciate the indications for operative interference, to say nothing of the technic of difficult and dangerous operations. The most she can learn is to know the progress of normal labor and to recognize such deviations therefrom as to require her to call for assistance, and to ground herself thoroughly in the details of antisepsis and asepsis. Therefore our rules, following those of all countries whose experience has formulated these restrictions, specify when a physician must be called. Any violation of these specifications shall be considered as proof that the midwife practices medicine, and makes her subject to the penalties prescribed by the Medical Practice Act.

So far the State goes in defining the functions of midwives and in controlling them. It does not directly propose to educate them. However, we must admit that their ignorance of asepsis and antisepsis is practically a very great objection to them. There is much danger from this source, which is forcibly illustrated by the study of the mortality from puerperal infection in Chicago. In the tables already referred to I have obtained the average annual mortality rate from puerperal infection for the decennial periods 1866 to 1875, 1876 to 1885, and 1886 to 1895. In the first period there were 127 deaths from puerperal infection for every 1000 deaths

from all causes of women of childbearing age, namely women from 15 to 45 years old. In the second decennial period there were ninety-seven deaths, and in the last period seventy-three deaths. The rate based on the number of confinements shows about the same rate of decline. In the three periods, for every 1000 confinements the rate was 7.6, 5.5, and 4.1 respectively. These figures show indeed a decline, and so far are encouraging. The decline corresponds in time to the spread of the teachings of Lister, and is no doubt due to the excellent teaching of asepsis and antisepsis in our medical schools. The fact remains, however, that the mortality rate from puerperal infection is still very much too high, and indeed has increased during the last four years. In 1891 it was 62 per 1,000 deaths of women of childbearing age, in 1892 it was 60 per cent., in 1893 65 per cent., in 1894 71 per cent., and in 1895, 69 per cent. In other words, puerperal infection still kills more women in the prime of life, women of the greatest worth to their families and to the State, than any other cause except consumption.

Who is responsible for this large continuing mortality, physicians or midwives? While it is impossible to answer this question from the imperfect records of the Registrar's office, it seems very certain that the improvement for the last decades is due to the better training of medical students, and that the bad results of the last few years are largely due to midwife practice, which has not made corresponding advance.

Hence I claim justification in presenting to this Staff the subject announced on the program. The scope of our duties is yet to a certain extent indefinite and will be left to natural development. We are called on by midwives to treat childbed fever. Is it not reasonable that we should try to prevent its development? I look forward to the growth of our organization in such a way that each member of the Staff shall have practical charge of the midwives in his district. Like the commander of a company in an army, he shall inspect the records and outfits of the members of his division, and he shall come to feel so far responsible for the practice in his district that he will try to keep the mortality and morbidity records as low as possible. This is the condition in some of the German provinces where the best obstetric results are obtained. It is impossible for us at present to exercise such control. As Dr. REILLY pointed out at the last meeting, it is important that we go slowly at first in order not to wreck the movement at the start by over-zeal. The first thing to do is to secure a complete registration of midwives. So long as a certain number defy the authority of

the City Board and the State Board of Health they would defy us and we would accomplish nothing. It will probably take some weeks or months longer to bring the defiant midwives to terms or to revoke their licenses to practice, and until then we must confine our efforts to advice to those who call on us. Yet, in this way we can, if we will, accomplish very much of value, and for this reason, it seems to me timely that we begin to study the mistakes and failures of midwives and consider the means to correct and prevent them.*

* The remainder of Dr. BACON'S address, which is published in full in the *Journal of the American Medical Association*, Vol. XXVIII, No. 6, deals with the subject-matter in the title: "Failures of Midwives in Asepsis."

Reports and Recommendations of the Chief of Bureau of Sanitary Inspection for the Years 1895-6.

HON. WILLIAM R. KERR,

Commissioner of Health:

DEAR SIR: The citizen who makes a complaint of the unsanitary condition, either at his house or in his immediate neighborhood, demands prompt attention at our hands. He is aware of the fact that provision is made for an inspector for each Ward, and acting on this knowledge he can see no reason why action on his complaint is not prompt and effective. He is not aware of the fact that of the thirty-four inspectors provided for sanitary work and charged on the rolls to the sanitary division of the DEPARTMENT—

Six are detailed as smoke inspectors ;
One as milk inspector ;
One as clerk to Registrar of Vital Statistics ;
Two as clerks in office ;
Twelve tenement inspectors, two in office ;
Twelve plumbing inspectors, one in office ;

leaving ten sanitary inspectors for the entire city. That the immense amount of work enumerated herein has been accomplished by this small and inadequate force bears testimony to efficient direction and untiring, faithful work on the part of the inspectors.

For the past two years increased demands have been made upon this Bureau by reason of new methods inaugurated in the DEPARTMENT called for inspection of premises where contagious diseases are located, and the enforcement of the ordinance so as to bring about proper sanitary conditions in such localities. This work emphasizes the

necessity of an increase of the force in the direction of inspection. There should be a tenement inspector for each ward exclusive of the fifteen plumbers, and four clerks for office work, and a stenographer. This would enable us to make what has been too long neglected—a periodical house-to-house inspection enabling us to forestall the unsanitary conditions in any part of the city.

The entire force deserves commendation for the amount of work accomplished. The lady inspectors particularly in regard to the inspection of workshops and the improvements effected by and through their efforts.

Some provision should be made in regard to cheap car rates for the force. It is too great a burden to exact from their salary.

An ordinance passed in 1895 provided for the examination of all men engaged in the business of plumbing, Chief Inspector being made Examiner. These examinations, the questions asked and answers given should have been a matter of record. This could not be done in the absence of a stenographer, no provision whatever being made in the ordinance for such. I therefore urge in order that the work of this Bureau may be successfully carried out that a stenographer be provided for the coming year.

Notwithstanding the good work accomplished I must confess that much remains undone by reason of the inadequacy of the force and the vast territory to be covered. The majority of complaints entered at this office come from the best parts of the city and from the better class of our citizens. There are homes and surroundings in good and wholesome condition whose owners are quick to resent the shortcoming of their neighbors, and demand, and justly so, that the ordinances be rigidly enforced upon others in the vicinity. Unfortunately the poorer quarters of our city, by reason of the inadequacy of our force, do not receive that

attention so much needed. Here is where our best efforts should be concentrated among those whose ignorance and indifference to sanitary surroundings are a constant menace to the entire community. These conditions could be improved by frequent inspection and conversations with them. I would suggest that inspectors with a knowledge of their customs, habits and language should be placed in charge and held responsible for the sanitary conditions of such localities. This would be of great benefit during epidemics of disease and enable our medical force, by reason of our thorough knowledge of existing conditions, to apply the proper remedies without loss of time, making the work in such directions doubly effective.

The inspection of new buildings as to plumbing and drainage has been productive of the best results. Our citizens building homes fully appreciate the benefits accruing to them through the thorough methods of this DEPARTMENT in this most important adjunct of a healthy home. I am pleased to say that the health and comfort of the occupants of the county building have been subserved through our efforts, the plumbing and drainage having been remodeled and placed in good sanitary condition. Our theaters, public halls, schools, etc., are being inspected and their sanitary condition noted, while necessary improvements are ordered wherever necessary. One of the greatest improvements of the year in connection with the DEPARTMENT was the order requiring the inspectors to wear the uniform prescribed and adopted for the DEPARTMENT. It has enhanced the value of the officer in the eyes of those he comes in contact with in the performance of his duties, while the officer, knowing the good name of the DEPARTMENT is in his keeping, has been careful as to his conduct and appearance in the discharge of his duties.

In the event of an increase of the inspection force so as to permanently place an inspector in each ward, I would

suggest that each officer call up the DEPARTMENT at a stated hour each day from the police station in his district so that emergency complaints could have prompt action. It frequently happens that the citizen whose home is adjoining unimproved property finds that during the night the same has been made a dumping ground for loads of concentrated foulness. His complaint to the office, even if promptly received, does not give that relief to which he as a citizen is entitled. The DEPARTMENT, on such a complaint, must find the owner of the property on which the nuisance has been dumped serve him with a notice to remove the same within a reasonable time. In the meantime the complainant's relief is slow, or perhaps the owner of the property is a non-resident, or the property is in litigation, thus effectually tying the hands of the DEPARTMENT in giving the complainant the relief to which he is entitled as a taxpayer. I would, therefore, suggest that during the coming year a team and wagon be placed at the service of the DEPARTMENT to enable us to meet emergencies of this kind.

VALUE OF THE CITY'S SUPERVISION AND INSPECTION OF NEW BUILDINGS.

The decrease of the death rate in cities is usually claimed by the medical gentlemen at the head of the DEPARTMENTS OF HEALTH as due to the advancement and superior knowledge of the cause and treatment of the various ills with which poor humanity is afflicted. While this may be accepted as partially true, there are many reasons why the mechanical sanitarian should take for his trade or profession some credit for what has been accomplished by and through his efforts in the enactment and enforcement of laws and

ordinances governing plumbing, drainage, and ventilation. Human life is valuable, and every sacrificed life, sacrificed by reason of unsanitary conditions of the home or workshop, is a material loss to the community. The cost, in a monetary sense, to bring to adult life a man or woman is thousands. This is money invested by the individual members of the community, and premature death is a loss to the community of so much capital. How to prevent this loss of capital to the community should tax the best efforts of our legislators and the thinking, intelligent portion of our citizens. The farmer who loses a prize ox measures it as a calamity; he had no thought of expense in his efforts to save the life of the animal, and his grief is great when, despite his efforts, it succumbs to disease. But what of the conditions surrounding his home? No drains, the kitchen waste a puddle at the back door, stinking and nauseous, his well in close proximity to his typhoid-breeding privy; his wife who came to him with health, bloom and beauty, now sallow, listless, lifeless and dejected, her only hope of a betterment of condition, the grave. Here is a fairly intelligent man, living in an intelligent age, with surroundings of his choice and making barbarous. He rails at ill luck in the sickness and death of his children, while their deaths are but the sequel to his parsimony, ignorance and indifference. Surrounded by an ocean of life-giving air he has poisoned that of his home and grumbled at the vengeance of the laws of outraged nature. Similar conditions prevail in our large cities, aided, abetted and maintained by the greed and cupidity of grasping landlords who, when the DEPARTMENT has demanded a betterment of the conditions surrounding these premises, haunt the DEPARTMENT with pleadings for leniency, backed up with letters, I am sorry to say, from men of influence and affluence who know better, or should, than to ask the DEPARTMENT to stop in its good work of trying to ameliorate

the condition of the unfortunates compelled by poverty and circumstance to occupy these wretched houses. Civic cleanliness can only be brought about by a co-operation on the part of the better elements of our cities. Precept and example on your part will have its effect. See to it that the houses you rent are in sanitary condition. Visit them yourself; see with your own eyes their condition and environments; take a human interest in your tenants; advise with them when advice is needed; let them see that you are not insensible to their wants and needs, and when you have done what is your duty you will be a better man for the doing, a better landlord and with better tenants, and with healthy occupants for your buildings, your rents will be promptly paid. In the light of dollars and cents it will pay you, and the consciousness of having done your duty will be with you. And you, preacher of the gospel, whose word is effective, take for your text that twin brother of godliness, cleanliness, and preach it in the pulpit and at the homes of your parishioners, and when called to the bedside of one of your church members, the victim of diphtheria, typhoid fever or some other disease born of the filthy surroundings of his home, do not tell him that his affliction is from his Maker, who doeth all things well, but be truthful. Tell him his sickness is the natural result of the conditions he maintained at his home, his broken and defective sewer, his unventilated waste pipes, his filthy catch-basin; these were the laboratory that produced the poison that laid him or those near and dear to him upon a bed of sickness. Divine Providence had nothing to do with it. The cause—his violation of laws human and divine. As you turn from this bed of sickness or death, ask yourself the question: Have I, with my opportunities for good, done my whole duty? What is the answer? No. Have I given them the knowledge I possess, or should possess, as to how they should live? In trying to take care

of these souls I have neglected that without which the soul cannot have an abiding place. If you yourself are not competent to give advice, then lose no time, but become a worshiper at the temple of Hygiene. Study this gospel, preach this gospel, in season and unceasingly. It is a creed all denominations can unite on, and your reward will be with you always in the healthy homes and faces of your people. Until you have done this you are not fitted for your calling, in that you had eyes but saw not, ears but heard not. And you, gentlemen, who legislate for us, give greater heed to these evils, inseparable from aggregations of men, women and children. Hold up the hands of those officers charged with the duty of caring for the public health; consult and advise with them. Failure on your part to provide the means to make the work effective is little short of criminal.

Epidemics born of unsanitary conditions will reach the well-appointed home as well as the hovel. The time to stop possible epidemics is now with us and always with us. Eternal vigilance is the price of immunity, and by well directed effort only can we guard against these conditions so inimical to the public welfare. A sickly and diseased population engenders and propagates vice and crime. The criminal's nursery is in the unsanitary quarter of every large city. Clean out, tear down every unsanitary building for the general good; in this the city's power should be absolute and beyond cavil. Foreign nations have taken action in their cities, and have spent millions in razing to the ground disease-breeding quarters, and putting in their place model tenement houses. The decrease in sickness, vice and crime among the inhabitants have given ample proof of the wisdom of these undertakings. We of this city of gigantic enterprise cannot afford to ignore the lessons taught us by older cities. Their remedies, if heroic, have been forced upon them after

years of palliative efforts. The inevitable will come to us if we ignore the lesson of their action, a lesson born of experience. Our building laws and sanitary ordinances should be so intelligently administered that every invention and discovery of better methods may be utilized for the public good and public benefit, while those charged with their administration should have that practical knowledge necessary to successfully administer advice, and co-operate with the citizen who seeks relief at the hands of the DEPARTMENT. Our duty, as well as that of every citizen having the welfare of the community at heart, should be to promote the welfare of the common man, to make the miserable less wretched, and to make a little more comfortable those who are disinherited of this world's goods. We can all, no matter what our station in life, do something to add to the sum of human happiness, to smooth the way for misfortune and poverty. It is said our country is the paradise of the rich ; it should be our duty to see that it does not become the purgatory of the poor. We can all aid, citizens and officials, in doing something to make the life of our citizens, especially the poorest of them, somewhat better, somewhat nobler, somewhat greater and somewhat happier.

If I have dwelt on the value of examination and approval of the plans, and the inspection and testing of the plumbing and drainage of buildings, I may be pardoned. This work was inaugurated in 1889 under my personal supervision and direction, and so satisfactory have been the results accruing to the citizen, and the public health so subserved, that we are constantly called upon for information from other cities as to the methods and results obtained. While our citizens have the fullest confidence in the decisions rendered by us as to the defects affecting the health of the home, no greater compliment could be paid to the worth and value of the sanitary division of the DEPARTMENT than the complaints

and abatements of the last five years. This is the work of all work done in the DEPARTMENT that is, and will be, the determining factor in the present and future death rate. As we sow so shall we reap, applies with force and truth to the daily work of this division.

SUMMARY OF THE WORK OF THE BUREAU.

| | 1895. | 1896. |
|--------------------------------------|--------|--------|
| New buildings examined..... | 11 038 | 10 838 |
| Houses on complaint..... | 8 891 | 10 128 |
| Other houses | 3 368 | 7 669 |
| Work places..... | 3 059 | 3 995 |
| Notices served..... | 8 909 | 11 214 |
| Abatements | 8 216 | 11 080 |
| Defective plumbing..... | 661 | 740 |
| Defective drainage | 349 | 797 |
| Offensive catch-basins | 191 | 281 |
| New sewers..... | 154 | 375 |
| Traps applied | 313 | 342 |
| Plumbing work ventilated..... | 130 | 215 |
| Rooms and workrooms ventilated | 12 | 87 |
| Leaky roofs repaired | 59 | 301 |
| Privies cleaned..... | 1 987 | 3 683 |
| Privy vaults abolished..... | 480 | 462 |
| New water closets constructed | 439 | 532 |
| Yards and premises cleaned | 1 055 | 2 135 |
| Plans examined | 7 675 | 5 465 |
| Miscellaneous | 1 361 | 971 |
| Law suits | 169 | 310 |
| Plumbers examined | | 777 |
| Plumbers licensed | | 744 |

SUMMARY OF COMPLAINTS RECEIVED DURING 1896, AND
FINAL DISPOSITION.

| <i>Ward.</i> | <i>Complaints Received.</i> | <i>No Cause.</i> | <i>Notices Served.</i> | <i>Abate-ments Secured.</i> |
|----------------------|---------------------------------|------------------|----------------------------|---------------------------------|
| First..... | 373 | 60 | 358 | 355 |
| Second..... | 391 | 56 | 369 | 361 |
| Third..... | 473 | 62 | 459 | 454 |
| Fourth..... | 444 | 58 | 424 | 423 |
| Fifth | 223 | 18 | 334 | 332 |
| Sixth | 190 | 20 | 295 | 293 |
| Seventh | 172 | 18 | 306 | 301 |
| Eighth..... | 228 | 22 | 351 | 333 |
| Ninth..... | 264 | 36 | 315 | 311 |
| Tenth..... | 286 | 34 | 313 | 308 |
| Eleventh..... | 435 | 65 | 404 | 401 |
| Twelfth..... | 478 | 70 | 445 | 439 |
| Thirteenth..... | 418 | 59 | 412 | 403 |
| Fourteenth | 382 | 48 | 404 | 398 |
| Fifteenth | 287 | 30 | 302 | 297 |
| Sixteenth..... | 282 | 28 | 324 | 321 |
| Seventeenth | 286 | 16 | 395 | 378 |
| Eighteenth | 292 | 22 | 327 | 311 |
| Nineteenth..... | 338 | 19 | 509 | 486 |
| Twentieth | 273 | 28 | 295 | 293 |
| Twenty-first | 249 | 23 | 288 | 286 |
| Twenty-second | 237 | 22 | 285 | 281 |
| Twenty-third | 214 | 14 | 281 | 279 |
| Twenty-fourth | 348 | 35 | 355 | 351 |
| Twenty-fifth | 375 | 44 | 385 | 383 |
| Twenty-sixth | 270 | 30 | 327 | 320 |
| Twenty-seventh | 230 | 29 | 261 | 259 |
| Twenty-eighth | 264 | 26 | 298 | 295 |
| Twenty-ninth | 269 | 21 | 305 | 300 |
| Thirtieth | 259 | 22 | 307 | 303 |
| Thirty-first | 358 | 38 | 366 | 362 |
| Thirty-second | 491 | 47 | 492 | 488 |
| Thirty-third | 439 | 41 | 442 | 438 |
| Thirty-fourth | 368 | 31 | 397 | 393 |
| Totals | 10 886 | 1 193 | 12 131 | 11 931 |

Respectfully,

ANDREW YOUNG,

Chief Inspector.

Report of the Smoke Division.

BY D. J. MAY, CHIEF SMOKE INSPECTOR.

I TAKE pleasure in submitting the following report of the Smoke Division of this DEPARTMENT for the years 1895 and 1896 :

That the DEPARTMENT has been successful is indeed gratifying considering the enormity of the nuisance, and a glance at the territory necessarily covered will reveal to even the most casual observer the unlimited amount of work coming under the supervision of this DEPARTMENT.

To abate the smoke nuisance in a city the size of Chicago is a matter well worthy of serious consideration. When it is remembered that our city is the great manufacturing center of the country, with immense factories of all kinds, besides having gigantic business and apartment buildings in all of which the use of steam is required, it becomes quite plain that the subject of combustion in this connection is a vital question. For steam purposes there are not less than 50 000 000 pounds or 25 000 tons of coal used every 24 hours, of which 90 per cent. is consumed in the daytime. Situated as it is, Chicago is practically limited to the use of the bituminous coal of Illinois and Indiana, as the maintenance of the mining industries of these States is an important factor in the general progress of the city. Under these conditions there are but two ways by which the requirements of the smoke ordinance may be fulfilled, either an abundance of boiler capacity, together with carefully constructed spacious boiler rooms, or the use of devices that will consume the smoke resulting from heavy firing.

It is the experience of the officers of the Smoke Department that the steam plants in Chicago, with very few exceptions, are constantly taxed to their utmost capacity and in many cases they are expected to do work of from 40 to 75 per cent. in excess of the rated capacity of their boilers. On account of this overtaxation of the boiler capacity, both in manufacturing plants and also in business blocks and apartment buildings, a heavy smoke follows as a natural consequence from over 90 per cent. of these plants. As a result of prosecutions for the violation of the smoke ordinance there has been a very general adoption of smoke-consuming devices; but of those on the market only a very few are worthy of the name while those which have a high order of merit do not accomplish the desired results because the demands made upon the plants in which they are placed are excessive. The great trouble arises at this point. When the owners of plants have spent from \$75 to \$800 on each boiler for a device that will prevent smoke, they will not believe but that they are the objects of unwarranted and malicious attacks when told that they are still violating the ordinance. When it is proved to them conclusively that dense black smoke is issuing from their chimneys, quite frequently they either attribute it to the firemen or some mishap for the time being. In nearly all such cases the means taken for the prevention of smoke should be held totally inadequate by engineers capable of judging, who would undoubtedly name some other way. It has been proved so conclusively since the present administration came into power, that smoke can be prevented without any reduction in the maximum capacity of the boilers, that the Smoke Inspection Bureau is warranted in the position it takes when it accepts no excuses for violation of the ordinance and requires the substitution of devices known to be effectual and to have stood the test for those that have failed.

A great many plants are now burning coal that formerly used gas and oil. This of course adds to the list of stacks liable to cause a nuisance; but the owners as a rule have been very willing to secure the necessary devices.

One of the arguments used by owners of plants in certain localities as a reason for violating the ordinance is that they confer such benefits upon the community that they more than counterbalance any nuisance made by them. But the DEPARTMENT will listen to no such arguments as it does not interpret the ordinance as relating to any particular locality. It is the purpose of this DEPARTMENT to enforce the ordinance in all localities. It holds that plants on the outskirts of the city are just as amenable to the law as those in the business centers, and has given them to so understand. One of the sources of annoyance, and not the least one, is the smoke caused by many public school buildings. They should be among the first to set a good example instead of furnishing pretexts for persistent law breakers.

The most difficult matter to contend with is the suppression of smoke caused by locomotives and tug-boats. However, a great improvement has taken place during the last year, most of the roads entering Chicago having fully 90 per cent, of their engines equipped with smoke devices.

SUMMARY OF R. R. ENGINES.

| | |
|--|------|
| No. of engines entering Chicago..... | 1408 |
| No. of engines equipped with smoke consumers | 1281 |
| No. of engines not equipped with smoke consumers | 128 |
| No. of engines equipped during 1896..... | 121 |
| No. of engines equipped previous to 1896..... | 1160 |

The matter of tug-boats remains more obstinate, no device having been invented that will apply successfully to marine boilers used on tug-boats burning soft coal; and to use hard coal would raise the towing rates to an extent that

would drive importation from Chicago ports. Some of these boats, however, are now experimenting with the burning of oil, which if it prove successful will be the solution of a very vexed question.

Since the organization of the Smoke Bureau under the present administration, for the year 1895, the Chief Smoke Inspector and his six Inspectors have discovered and investigated 11 232 violations of the smoke ordinance in all portions of the city, prosecuting 259 suits.

During the year 1896 there have been discovered and investigated 9876 places and 567 suits have been prosecuted. These prosecutions have resulted in an abatement of fully 90 per cent. of the causes of the complaints. Have had the following work done :

| | |
|---|------|
| Furnaces repaired..... | 387 |
| New smoke devices applied..... | 375 |
| Devices repaired | 463 |
| No. of boilers in City of Chicago | 6720 |

Report of the City Statistician for the Years 1895-6.

BY EUGENE SEEGER, CITY STATISTICIAN.

THE Sunday after the Great Fire the Rev. Robert Laird Collier, enumerating in his sermon those things which the Chicago people had not lost through the calamity, said: "We have not lost—first, our geography. Nature called the lakes, the forests, the prairies, together in convention long before we were born, and they decided that on this spot a great city should be built. The railroads and energetic men have aided in fulfilling the prophecy. Second, we have not lost our men—noble, generous and of genius. Third, we have not lost our hope."

The prolonged period of industrial prostration under which our nation and city have suffered since 1893, and from which we are still suffering, render these words applicable to the present situation. Our hope at present rests far more on "our geography" than on facts and figures, such as come within the province of the statistician.

Chicago is the center of a circle of 1000 miles diameter, surrounded, except where Lake Michigan interrupts it, by the richest agricultural territory in the world, arable land and fine timber, everything needed for manufacturing and building, as well as all the necessities of life, such as fuel, wool, leather, lumber, iron, stone, brick, and the various food stuffs which render the West so important a factor in the world's markets, being close at hand. Chicago is the greatest railroad center in the world. The population, whose natural trade-center it constitutes, is estimated at 23 millions—about five millions larger than the population of the North

Atlantic Division, of which the City of New York forms the commercial center.

The organic development of Chicago has been proportionate to its boundless opportunities for trade and commerce; it is therefore but natural that a prostration and stagnation of business, such as was brought about by the great crisis of 1893, should be keenly felt here in the most typical city of American enterprise and the characteristic landmark of the world's industrial progress. It is the unpleasant duty of the City Statistician to record for the two years last past an industrial condition which is far from being satisfactory or even healthy. Since the last report of this DEPARTMENT (1894), only a comparatively small increase in the city's population is noted, and there is a decrease in the products of our leading industries, such as the wood-working trades, metal industries, garment manufacturing, in the packing houses, as well as in the number of those employed by the lake and railroad transportation companies and in the building trades. It is true there were more hands employed in the manufacturing industries in 1896 (152,806) than in 1895 (140,026), especially in the iron and steel industries and in the stock yards, but those hands worked fewer days in the week, so that their earnings were considerably less than in the previous year. The only redeeming feature in this connection is the decrease in child labor. There were in the manufacturing industries, 5830 children employed in 1896, as against 6757 the previous year.

The noted depression in the retail trade, especially as far as the smaller stores are concerned, which are scattered throughout the city, is only partly due to the general prostration of trade, necessitating an under-consumption on the part of the wage-earners and daily increasing the number of those who are drifting into the peddling and huckstering pursuits. Another cause of the depression is the concentration

of the retail trade in a few large department stores in the heart of the city, six of which employ a force of not less than 15,000 hands.

During the decade which ended with 1892, the year before the panic, the average annual increase in the city's population amounted to 80 000. The census of the present year shows a population of 1 619 226 as against 1 567 727 reported in 1894, an apparent annual increase of only 25 750. In 1894 the male population exceeded the female by 38 967, whereas in 1896 the excess was 50 717.

Owing to the great improvement in rapid transit within the city limits, a marked and very desirable change has taken place during the last two years in the distribution of our population, the number of inhabitants in the more or less over-crowded interior wards of the city having largely decreased, and a corresponding increase having taken place in the wards constituting the outskirts of the city, where there is abundant room for healthier and more comfortable homes at lower rates.

The following table shows the details of this very interesting redistribution of Chicago's population since 1894. No one acquainted with the facts and figures will deny that our city at present contains more inhabitants than can comfortably be sustained by our commerce and industries in their present depressed condition. But we may cherish the hope that in the very near future great industrial Chicago will not only again have lucrative work for all its citizens, but will be restored to her former condition of phenomenal prosperity and progress.

POPULATION OF THE CITY OF CHICAGO, 1894-1896.

| <i>Wards.</i> | <i>1894.</i> | <i>1896.</i> | <i>Increase.</i> | <i>Decrease.</i> |
|-------------------------------------|--------------|--------------|------------------|------------------|
| First | 35 546 | 24 836 | ..... | 10 710 |
| Second | 33 923 | 29 937 | ..... | 3 986 |
| Third | 39 999 | 36 063 | ..... | 3 936 |
| Fourth | 37 502 | 41 225 | 3 723 | ..... |
| Fifth | 51 813 | 51 974 | 161 | ..... |
| Sixth | 61 038 | 62 742 | 6 704 | ..... |
| Seventh | 44 244 | 41 990 | ..... | 2 254 |
| Eighth | 42 038 | 41 736 | ..... | 302 |
| Ninth | 49 641 | 56 390 | 6 749 | ..... |
| Tenth | 72 141 | 79 063 | 6 922 | ..... |
| Eleventh | 43 658 | 41 523 | ..... | 2 135 |
| Twelfth | 65 320 | 73 507 | 8 187 | ..... |
| Thirteenth | 48 373 | 51 053 | 2 680 | ..... |
| Fourteenth..... | 57 942 | 63 734 | 5 792 | ..... |
| Fifteenth..... | 67 934 | 71 762 | 3 828 | ..... |
| Sixteenth | 66 760 | 66 334 | ..... | 426 |
| Seventeenth..... | 29 710 | 25 135 | ..... | 4 575 |
| Eighteenth..... | 36 758 | 27 886 | ..... | 8 872 |
| Nineteenth..... | 53 729 | 48 280 | ..... | 5 449 |
| Twentieth..... | 36 546 | 32 592 | ..... | 3 954 |
| Twenty-first..... | 37 864 | 34 029 | ..... | 3 835 |
| Twenty-second .. | 40 650 | 36 497 | ..... | 4 153 |
| Twenty-third.... | 49 739 | 40 199 | ..... | 9 540 |
| Twenty-fourth... | 40 441 | 36 157 | ..... | 4 284 |
| Twenty-fifth.... | 35 969 | 44 674 | 8 705 | ..... |
| Twenty-sixth.... | 47 335 | 57 815 | 10 480 | ..... |
| Twenty-seventh .. | 19 668 | 25 164 | 5 496 | ..... |
| Twenty-eighth .. | 18 287 | 22 701 | 4 414 | ..... |
| Twenty-ninth ... | 41 041 | 39 334 | ..... | 707 |
| Thirtieth..... | 84 662 | 93 154 | 8 492 | ..... |
| Thirty-first..... | 39 873 | 44 391 | 4 518 | ..... |
| Thirty-second ... | 45 801 | 54 134 | 8 333 | ..... |
| Thirty-third..... | 34 420 | 41 485 | 7 065 | ..... |
| Thirty-fourth.... | 57 362 | 65 508 | 8 146 | ..... |
| Total Ward population in 1894 | | | 1 567 727 | |
| Total population 1896 | | | 1 619 226* | |

* Including traveling men, mariners and railroad employees not distributed by wards.

MANUFACTURING INDUSTRIES.

| Total No. Employed | | No. of Places. | Girls under 16 | Boys under 16 | Females over 16 | Males over 16 | Children under 16 |
|-----------------------|--|-------------------|-------------------|------------------|--------------------|------------------|----------------------|
| 3 283 | Brick, Stone and Terra Cotta..... } | 74 | ..... | 95 | 25 | 3 163 | 95 |
| 31 069 | Food Products, incl. Candy, Cigars..... } | 386 | 437 | 563 | 3 907 | 26 162 | 1 000 |
| 24 817 | Garment Mfg..... | 2 648 | 1 334 | 246 | 13 439 | 9 798 | 1 580 |
| 2 351 | Leather Mfg..... | 67 | 9 | 38 | 127 | 2 177 | 47 |
| 51 141 | Metal-Working Trades..... } | 592 | 73 | 1 086 | 1 793 | 48 189 | 1 159 |
| 1 548 | Paper Boxes and Novelties..... } | 30 | 193 | 51 | 847 | 457 | 244 |
| 10 702 | Printing Trades..... | 377 | 116 | 110 | 2 751 | 7 725 | 226 |
| 19 740 | Wood-Working Trades..... } | 428 | 96 | 1 032 | 432 | 18 180 | 1 128 |
| 8 155 | Miscellaneous Trades. | 353 | 100 | 251 | 1 715 | 6 089 | 351 |
| 152 806 | | 5 455 | 2 358 | 3 472 | 25 036 | 121 940 | 5 830 |

Report of Attorney for Department of Health.

BY VERE V. HUNT, ATTORNEY FOR THE DEPARTMENT.

FROM the 17th day of March, 1896, the date of my appointment, to December 31, 1896, 1782 cases have been prosecuted by me in the Justice Courts of this city for violations of the Health Ordinances, said cases being distributed as follows :

| | |
|--|-----|
| Violations of Smoke Ordinance..... | 567 |
| Violations of Milk Ordinance | 923 |
| Violations of Sanitary Ordinances..... | 292 |

In 1208 of these cases fines amounting to \$16 223 were imposed, 506 were dismissed on the defendants' paying the costs of suit after complying with the requirements of the DEPARTMENT making the complaint, and sixty-eight were decided in favor of the defendants ; ten appeals were taken.

Exclusive of the amount of fines paid to the Justices, \$1 744.60 have been paid into this DEPARTMENT up to December 1st, 1896, in satisfaction of the penalties imposed, which sum has been turned over to the Comptroller.

The constitutionality of the various ordinances has been again and again assailed by contesting counsel in the various cases heard, but never successfully, and the failure of these gentlemen to carry their contentions to a higher tribunal proves that the health ordinances of this municipality have been drawn as near to the bed-rock principles of the constitution as they can be drawn.

I cannot close without acknowledging my indebtedness to Mr. ALEXANDER HARPER of the Comptroller's Office for his assistance in the collection of the moneys due to this DEPARTMENT for fines, and for his suggestions as to the keeping of the books relating to my part of the same, which suggestions have converted into a pleasure what most professional men find a tedious task.

REPORT OF DEPARTMENT OF HEALTH

DEPARTMENT OF HEALTH—DIVISION OF ACCOUNTS.

Monthly Expenditures on all Accounts and Total Disbursements for the Calendar Year, ended December 31, 1895.

HENRY T. CARR, *Secretary*.

| MONTHS. | Salaries. | Hospital and Emergency Salaries and Supplies. | Printing, Stationery and Miscellaneous. | Laboratory Supplies. | Carter H. Harrison Bath Supplies. | New Bath. | New Hospital. | Vaccination: Salaries and Supplies. | Diphtheria Emergency Salaries and Supplies. | Totals. |
|-----------|--------------|---|---|----------------------|-----------------------------------|-----------|---------------|-------------------------------------|---|---------------|
| January | \$ 5 806.89 | \$ 10 786.51 | \$ 459.30 | \$ 180.48 | \$ 246.52 | | | | | \$ 17 479.70 |
| February | 5 800.01 | 9 620.65 | 120.10 | 162.71 | 135.71 | | | | | 15 839.18 |
| March | 11 785.03 | 12 513.87 | 721.69 | 213.66 | 497.50 | | | | | 25 731.75 |
| April | 7 841.51 | 4 153.85 | 94.00 | 469.54 | 219.13 | | | | | 12 778.03 |
| May | 7 418.15 | 3 417.34 | 1 139.56 | 156.27 | 251.59 | | | | | 12 382.91 |
| June | 7 433.67 | 2 320.82 | 3 499.33 | 125.72 | 244.02 | | | | | 13 623.56 |
| July | 8 021.90 | 2 696.78 | 592.28 | 171.93 | 390.83 | | | | | 11 873.81 |
| August | 8 172.27 | 1 976.03 | 725.11 | 262.78 | 200.65 | \$ 150.00 | | \$ 1 342.00 | | 12 838.84 |
| September | 8 304.48 | 2 089.05 | 1 207.17 | 394.55 | 304.66 | | | 1 297.20 | | 13 437.11 |
| October | 8 128.98 | 4 227.33 | 282.05 | 239.86 | 497.46 | | | \$ 9 641.42 | | 25 629.60 |
| November | 8 178.98 | 2 302.78 | 145.41 | 365.31 | 233.90 | | | 514.41 | \$ 2 449.53 | 16 162.57 |
| December | 8 178.98 | 4 032.83 | 188.90 | 475.52 | 303.76 | | | 7 108.36 | 2 575.59 | 25 436.29 |
| Total | \$ 94 970.94 | \$ 60 137.84 | \$ 9 174.90 | \$ 3 218.33 | \$ 3 525.73 | \$ 150.00 | \$ 17 264.19 | \$ 9 726.30 | \$ 5 025.12 | \$ 203 193.85 |

NOTE.—The sum of \$997.56, receipts from miscellaneous sources, was paid to the City Comptroller during the year 1895.

DEPARTMENT OF HEALTH—DIVISION OF ACCOUNTS.

Monthly Expenditures on all Accounts and Total Disbursements for the Calendar Year, ended December 31, 1896.
HENRY T. CARR, *Secretary.*

| | Salaries. | Printing, Stationery, and Misc. | Cartier H. Harrison | Hospital Supplies. | Ambulance Barn, Forage, etc. | Laboratory Supplies. | Milk Inspec- tors' Forage, etc. | Disinfect- ants. | Vaccina- tion: Supplies. | Diphtheria Emergency: Supplies. | New Bath. | New Hospital. | Ice Inspection: Salaries and Supplies. | Totals. |
|-----------|---------------|---------------------------------------|------------------------|-----------------------|---------------------------------------|-------------------------|--|---------------------|--------------------------------|---------------------------------------|-----------|------------------|---|---------------|
| January | \$ 7 622.00 | \$ 839.84 | \$ 131.25 | \$ 241.34 | \$ 390.72 | \$ 238.08 | \$ 159.40 | \$ 83.88 | \$ 869.40 | \$ 1 626.85 | \$ 183.76 | + | ..... | \$ 12 386.52 |
| February | 12 864.93 | 893.35 | 107.86 | 256.23 | 140.95 | 137.62 | 183.75 | 38.02 | 5446.94 | 1747.04 | * | + | ..... | 21 816.69 |
| March | 9 253.20 | 227.50 | 240.94 | 109.15 | 142.47 | 279.90 | 99.50 | 51.40 | 337.55 | 1 626.18 | * | + | ..... | 12 367.79 |
| April | 9 291.68 | 325.68 | 273.03 | 221.11 | 149.65 | 130.85 | 85.25 | 36.84 | 538.64 | 430.47 | * | + | ..... | 11 483.20 |
| May | 9 827.86 | 288.10 | 100.96 | 95.63 | 35.65 | 207.75 | 86.00 | 65.34 | 908.66 | 381.00 | * | + | ..... | 11 496.95 |
| June | 9 666.69 | 473.51 | 242.50 | 96.98 | 102.39 | 540.66 | 92.50 | 18.37 | 869.70 | 380.55 | * | + | \$ 284.50 | 12 768.35 |
| July | 9 602.08 | 579.23 | 148.64 | 211.89 | 95.07 | 306.80 | 90.80 | 97.93 | 519.35 | 432.00 | 150.00 | + | 375.00 | 12 608.79 |
| August | 9 687.51 | 480.52 | 82.40 | 734.46 | 119.87 | 118.77 | 84.00 | 35.92 | 688.03 | 2 132.82 | * | + | 375.00 | 14 539.30 |
| September | 9 608.76 | 585.18 | 186.71 | 1139.44 | 151.88 | 434.90 | 86.75 | 67.44 | 1 977.50 | 1 538.80 | * | + | 375.00 | 16 152.36 |
| October | 9 677.51 | 270.10 | 190.10 | 444.91 | 103.38 | 200.58 | 101.45 | 69.35 | 1 946.42 | 1 880.34 | * | + | 375.00 | 13 259.14 |
| November | 9 739.01 | 543.45 | 67.40 | 2 370.86 | 135.41 | 143.96 | 126.25 | 24.05 | 2 894.67 | 2 187.81 | * | + | 375.00 | 18 596.87 |
| December | 9 618.97 | 2 748.05 | 140.80 | 1 591.72 | 230.04 | 744.67 | 123.00 | 62.10 | 3 314.00 | 2 431.59 | * | + | 381.34 | 21 387.28 |
| Totals | \$ 115 950.20 | \$ 8 254.51 | \$ 1 912.59 | \$ 7 513.72 | \$ 7 796.38 | \$ 3 485.54 | \$ 1 318.65 | \$ 650.64 | \$ 20 310.86 | \$ 16 795.45 | \$ 333.76 | | \$ 2 541.84 | \$ 180 863.24 |

* Transferred \$11 516.24, balance of the amount appropriated for the erection of the new bath to the credit of the Department of Public Works, Dec. 15, 1896.

† Transferred \$57 735.81, balance of the amount appropriated for the erection of the new hospital to the credit of the Department of Public Works, Dec. 15, 1896.

NOTE.—The City Comptroller was paid the sum of \$6485.63 during the year 1896, being for receipts as follows:

| | |
|--|------------|
| Receipts from sale of antitoxin..... | \$ 3000.00 |
| Receipts from sale of condemned calves..... | 843.40 |
| Receipts from House of Correction..... | 6.28 |
| Fines collected from June 12, 1896, to January 26, 1897..... | 2635.95 |
| | \$ 6485.63 |

ROSTER

OF THE

DEPARTMENT OF HEALTH

AT THE CLOSE OF 1896.

COMMISSIONER'S OFFICE.

| | | | | | | | |
|-----------------------------|---|---|---|---|---|---|-----------------------------------|
| WILLIAM R. KERR, | - | - | - | - | - | - | COMMISSIONER OF HEALTH. |
| F. W. REILLY, M. D., | - | - | - | - | - | - | ASSISTANT COMMISSIONER OF HEALTH. |
| HENRY T. CARR, | - | - | - | - | - | - | Secretary. |
| VERE V. HUNT, | - | - | - | - | - | - | Attorney. |
| ROBERT H. MITCHELL, | - | - | - | - | - | - | Clerk. |
| S. A. SHAFFER, | - | - | - | - | - | - | Clerk. |
| MISS MARGARET D. NOONAN, | - | - | - | - | - | - | Stenographer. |
| GEORGE SCHWEITZER, | - | - | - | - | - | - | Messenger. |

DIVISION OF CONTAGIOUS DISEASES.

| | | | | | | | |
|---------------------------|---|---|---|---|---|---|--------------------------|
| E. GARROTT, M. D., | - | - | - | - | - | - | CHIEF MEDICAL INSPECTOR. |
|---------------------------|---|---|---|---|---|---|--------------------------|

MEDICAL INSPECTORS.

| | |
|--------------------------|-----------------------|
| MALCOLM GUNN, M. D. | GEORGE C. HUNT, M. D. |
| G. F. WASHBURNE, M. D. | J. J. MULDOON, M. D. |
| T. J. BALHATCHETT, M. D. | E. P. MURDOCK, M. D. |
| C. A. WADE, M. D. | JOSEPH REESE, M. D. |
| I. A. ABT, M. D. | W. C. BOUTON, M. D. |

DISINFECTORS.

| | |
|-------------------|-----------------------------|
| J. A. EGAN, M. D. | C. ST. C. DRAKE, M. D. |
| J. DALY, | A. J. KAPP, |
| W. LINDHOLM, | RICHARD HALE, |
| H. M. REED, | S. FRENCH, |
| C. BURR, | D. W. JONES. |
| | |
| A. L. RANDALL, | - - - - - Department Clerk. |
| D. C. APPLETON, | - - - - - Clerk. |
| J. F. O'BRIEN, | - - - - - Clerk. |

DIVISION OF SANITARY INSPECTION.

| | | | | | | |
|-----------------------|---|---|---|---|---|----------------------------------|
| ANDREW YOUNG, | - | - | - | - | - | CHIEF SANITARY INSPECTOR. |
| D. J. MAY, | - | - | - | - | - | CHIEF SMOKE INSPECTOR. |
| EUGENE SEEGER, | - | - | - | - | - | CITY STATISTICIAN. |

TENEMENT INSPECTORS.

| | | |
|--------------------|-------------------|-----------------------------|
| W. F. DILLON. | R. J. DUNLOP. | M. GATZERT, |
| M. HORNE, | L. J. DECKERT, | GEORGE F. COLLINS, |
| J. H. KILIAN. | CHAS. W. FORSYTH, | A. W. RAFFEN, |
| P. J. BURKE, | H. STANTON, | H. M. OLIPHANT, |
| W. J. BURKE, | WILLIAM SMITH, | D. J. BECKER, |
| A. LANDAHL, | G. H. MUSGRAVE, | J. M. PARNIE, |
| JOHN STRAND, | THOS. LYNCH, | GEORGE ALLEN, |
| H. M. HITCHCOCK, | J. J. CAREY, | J. G. SCOBAY, |
| CHAS. KRITCHKOFF, | F. BAUER, | M. J. SCHMITZ, |
| JOHN A. TROY, | E. A. JUNKIN, | W. O. CLEVELAND, |
| C. A. HAWLEY, | JOSHUA HILL, | W. P. SHERMAN, |
| | M. KAVANAUGH. | |
| MRS. C. DOOLITTLE, | MRS. I. SULLIVAN, | MRS. M. MCCORMICK, |
| MRS. J. DUNLAP, | MRS. E. MCCABE, | MRS. D. B. BINGHAM. |
| H. WAGNER, | - - - - - | Clerk Record of Complaints. |
| C. BOTTHOFF, | - - - - - | Clerk Record of Plans. |

MUNICIPAL LABORATORY.

| | | | | |
|--------------------------------|---|---|---|----------------------------------|
| ADOLPH GEHRMANN, M. D., | - | - | - | SUPT. AND BACTERIOLOGIST. |
| C. L. KENNICOTT, | - | - | - | CHEMIST. |
| F. E. WINEKOOP, | - | - | - | Assistant Bacteriologist. |
| D. B. BISBEE, | - | - | - | Assistant Chemist. |

MILK INSPECTORS.

| | | |
|--------------------|------------------|--------------|
| GEORGE S. NELSON, | JOHN FORBES, | A. LONG, |
| W. S. A. DRING, | JAMES U. TURNER, | FRANK TODD. |
| WALTER EVANS, | - - - - - | Milk Tester. |
| MISS AMANDA DOERR, | - - - - - | Clerk. |
| GEORGE W. JOHNSON, | - - - - - | Helper. |

MEAT INSPECTORS.

| | | | | | | | |
|-----------------|---|-----------------|---|-----------------|---|---|------------------|
| S. D. JAWORSKI, | - | - | - | - | - | - | Chief Inspector. |
| GEORGE MCKEON, | | A. BURMEISTER, | | R. GALAHER, | | | |
| E. W. LINDEEN, | | FRANK HOEY, | | J. H. CLAPP, | | | |
| P. J. REYNOLDS, | | F. A. HAMILTON, | | WM. J. O'BRIEN, | | | |

BUREAU OF VITAL STATISTICS.

| | | | | | | | |
|-----------------------|---|---|---|---|---|---|------------|
| M. O. HECKARD, M. D., | - | - | - | - | - | - | Registrar. |
| A. L. MILLER, | - | - | - | - | - | - | Clerk. |

CARTER H. HARRISON BATH.

| | | | | | | | |
|------------------------|---|---|---|---|---|---|---------------------------|
| THOS. K. FORMAN, | - | - | - | - | - | - | Superintendent. |
| JOHN HARRIGAN, | - | - | - | - | - | - | Assistant Superintendent. |
| MRS. SUSIE COLLINS, | - | - | - | - | - | - | Attendant. |
| MRS. KATHERINE NUGENT, | - | - | - | - | - | - | Attendant. |

ISOLATION HOSPITAL.**IN CHARGE OF THE POOR HANDMAIDS OF JESUS.**

| | | | | | | | | |
|-------------------|---|---|---|---|---|---|---|---------------------|
| JOHN R. ROBINSON, | - | - | - | - | - | - | - | Engineer. |
| HENRY DICKINSON, | - | - | - | - | - | - | - | Assistant Engineer. |
| EDWARD TYNE, | - | - | - | - | - | - | - | Foreman. |
| F. E. GRAY, | - | - | - | - | - | - | - | Foreman. |
| FRANK OSENSKI, | - | - | - | - | - | - | - | Laborer. |

AMBULANCE BARN.

| | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|-----------------------------|
| A. W. CURRIE, | - | - | - | - | - | - | - | - | Foreman. |
| C. JOHNSON, | - | - | - | - | - | - | - | - | Barnman. |
| F. A. LA MONTE, | - | - | - | - | - | - | - | - | Driver. |
| WM. LADD, | - | - | - | - | - | - | - | - | Driver. |
| L. J. W. BIRN, | - | - | - | - | - | - | - | - | Engineer of Fumigating Van. |

DIPHTHERIA EMERGENCY STAFF.**MEDICAL INSPECTORS.**

| | |
|-------------------------|---------------------|
| • ROSA ENGLEMAN, M. D. | F. X. WALLS, M. D. |
| R. B. PREBLE, M. D. | WM. HESSERT, M. D. |
| J. R. NEELY, M. D. | M. M. RITTER, M. D. |
| C. C. FULLER, - - - - - | Collector. |

PART II.

VITAL STATISTICS

OF THE

CITY OF CHICAGO

FOR THE YEARS

1895-1896

Report of the Registrar of Vital Statistics.

M. O. HECKARD, M. D., REGISTRAR.

Two important and valuable advances—steps toward which were first taken by HEALTH COMMISSIONER Dr. REYNOLDS—have been made in the Bureau of Vital Statistics under the present administration of the HEALTH DEPARTMENT: First, in the form of the “Report of Death,” by which the attending physician is relieved of all responsibility and labor connected with such report, except that involved in a statement of his knowledge and belief as to the immediate and contributing cause or causes of death. For this purpose the ASSISTANT COMMISSIONER prepared the subjoined form of report and secured its approval by the State Board of Health, thereby, among other things, relieving the physician from the necessity of making duplicate reports:

[New Form of Report of Death.]

REFER TO BACK OF REPORT FOR INSTRUCTIONS.

REPORT OF DEATH.

Authorized by the State Board of Health, Sec. 4, 5, State Board of Health Act, 1877. Revised Ordinances, City of Chicago. Sec. 2030, 2050, 2051, 4958.

DEPARTMENT OF HEALTH: CITY OF CHICAGO.

BUREAU OF VITAL STATISTICS—DEATHS.

1. Name of Deceased (in full) _____
2. Sex: _____ Color: _____ 3. Born in _____
4. Age: _____ Years _____ Months _____ Days. 5. Lived in Illinois _____ years.
6. Died on the _____ day of _____ 189 , at about _____ M.
7. Single, Married, Widowed. Occupation: _____
8. Place of Death: _____ Ward _____
9. Place of Burial: _____ 10. Undertaker: _____ } License
Date: _____ 189 . Address: _____ } No.

REPORT OF DEPARTMENT OF HEALTH

PHYSICIAN'S CERTIFICATE OF CAUSE OF DEATH.

I HEREBY CERTIFY, That, to the best of my knowledge and belief, the cause of the death of the above named and described deceased was as hereunder written:

| CAUSE OR CAUSES OF DEATH. | | DURATION OF CAUSES | | | |
|---|---|--------------------|--------|-------|-------|
| Chief and Determining _____ | } | Days | Months | Years | Hours |
| _____ | | | | | |
| Contributing and Consecutive Causes _____ | } | | | | |
| _____ | | | | | |

WITNESS MY HAND, This _____ } (Signature:) _____ M. D.
day of _____ 189 _____ } Address: _____

[On back of Report.]

SINCE the Undertaker is necessarily obliged to consult the survivors, and in order to relieve the Physician of this task, the information required for filling out the REPORT OF DEATH will be obtained from the head of the family or other responsible friend, by the Undertaker; while the Physician's function may be limited to certifying as to the CAUSE OF DEATH.

It is optional with the Physician whether he first makes out the CERTIFICATE and leaves it with the family for the Undertaker, or whether he requires the filled-out REPORT to be brought to him for his CERTIFICATE. To provide for the former purpose, books of REPORT blanks may be obtained by the Physician from the Registrar of Vital Statistics, Room 4, City Hall. The stubs or counterfoils of these blanks will be found useful in preserving records of CERTIFICATES issued. A folder, "*Concerning the Physician's Certificate of Cause of Death,*" and a *Classified List* of such causes, is also furnished for the use of the Physician. The substance of this folder is also printed on the inside of the cover of the book of REPORT blanks.

TO THE UNDERTAKER.

The information required in the REPORT OF DEATH should be written clearly in the numbered spaces, as follows:

1. Full name of deceased. If an infant not named, write in: *Child of*, and give name of parents.
2. *Male* or *Female* and *Color* or *Race*, if other than *White*.
3. Name of *Country* where the deceased was born. If in the United States, give name of *State* or *Territory*.
4. Age in years, months and days.
5. Years of residence in Illinois.
6. Day, month and hour—*a. m.* or *p. m.*—of death.
7. Strike out the two words not required in this entry, and write in the *Occupation* of the deceased.
8. Write in the *exact* locality of death—number and name of Street, Avenue, Boulevard, etc., and number of Ward. If the death occurred in a Hospital or other Public Institution, or if the deceased was a non-resident, the *last previous residence* should be stated.
9. Name of Cemetery; or if for burial beyond the city limits the name of the city, town or other locality of the place of burial.
10. Full name, address and license number of Undertaker, and date of Report.

The folder referred to in the above, "Concerning the Physician's Certificate of Cause of Death," is as follows :

DEPARTMENT OF HEALTH : CITY OF CHICAGO.

BUREAU OF VITAL STATISTICS : DEATHS.

CONCERNING THE PHYSICIAN'S CERTIFICATE OF CAUSE OF DEATH.

EVERY physician under whose supervision a death occurs is required by State Law to report the same to the County Clerk, within thirty days after its occurrence, together with a CERTIFICATE OF THE CAUSE OF DEATH and such correlative facts as the STATE BOARD OF HEALTH may require.—Revised Statutes of Illinois; Chap. 126b.

Every physician who has attended in the City of Chicago any person during a last illness, or who has been present by request at the death of any person in said city, is required by City Ordinance to present to the DEPARTMENT OF HEALTH a written statement, by him signed, of the cause of such death, specifying the date, hour, place and street number of the place of such death; if from a contagious or infectious disease such report is to be made within twenty-four hours after death; if from any other cause, within thirty-six hours after death.—Laws and Ordinances, City of Chicago; Sec. 2030, 2050, 2051.

IN order to relieve the members of the medical profession of Chicago of the often unpleasant task of ascertaining the social and family data required by the form of report heretofore in use—as well as to obviate the necessity of the duplicate reports prescribed by the foregoing Statutes and City Ordinances—a special form of report has been prepared and adopted by the DEPARTMENT, with the concurrence and approval of the State Board of Health, which has authority in such matters under the Statutes.

This form is so arranged that the Physician need furnish only the strictly professional information concerning the *Cause of Death*—all else will be obtained by the undertaker, who will fill in the social and family data, etc., and, after procuring the Physician's certificate, will return the completed report to the Registrar of Vital Statistics as the basis for the burial permit.

This return to the Registrar will discharge the Physician's duty under the city ordinances above cited; and when the report is forwarded by the Registrar to the County Clerk the statutory requirement will be fulfilled.

For the further convenience of the Physician, as well as to secure a more approximate uniformity of classification and nomenclature in the certificate of the cause of death, the subjoined classified list of causes has been prepared and is furnished for the desk of the practitioner.

CLASSIFIED LIST OF CAUSES OF DEATH.

This list will be recognized as based, substantially, upon the "Provisional Classification and Nomenclature" of the Royal College of Physicians of London, Eng., which has been adopted by the Government Medical Services of the United States and Great Britain, and endorsed by the American Medical and American Public Health Associations.

All causes of death are grouped under three classes, as in the "Provisional Nomenclature"—

A. Deaths from General Diseases.

B. Deaths from Local Diseases.

C. Deaths from Violence—those not necessarily associated with either General or Local Diseases.

It is with Classes A and B only that the Certifying Physician is concerned—Class C belongs to the Coroner—and the titles under each have been reduced to the lowest working minimum. A very brief study of the LIST will suffice to master its scheme.

The absence of some usual titles will be noted. Certain of these are omitted either because the diseases do not occur here at all, or so infrequently as not to warrant retention in a standing list, or because they are rarely fatal. Among these are *Addison's disease*, *Asiatic cholera*, *Bronchocele*, *Cerebro-spinal fever*, *Chicken-pox*, *Chorea*, *Glanders*, *Hydrophobia*, *Influenza*, *Leprosy*, *Mumps*, *Plomaine poisoning*, *Scurvy*, *Sunstroke*, *Trichinosis*, *Typhus fever*, *Yellow fever*, etc. When death occurs from any of these or similar causes, full details should be given in the certificate.

Smallpox is omitted because the ordinances of the city require all cases of the disease to be taken charge of by the HEALTH DEPARTMENT and removed to the Isolation Hospital; and also because it is believed that, with the present efficient system of vaccination in Chicago, the disease will—as John Simon asserts that it will wherever vaccination is universally and efficiently performed—soon be "of as little effect as any extinct epidemic of the Middle Ages."

Some few omissions—*ex. gr.*, *Albuminuria*, *Emphysema*, *Gallstones*, *Jaundice*, etc.—have been made because they are titles of symptoms or conditions not of themselves the cause of death, which proximate cause should always be given.

On the other hand, some titles have been retained because, while the diseases are not believed to be prevalent or often fatal in this community, a considerable number of deaths are returned annually as from these causes, *ex. gr.*, *Diabetes*, *Pemphigus*, *Rickets*, *Thrush*, *Trismus*, etc.

One or two additions and changes have also been made, the reasons for which are obvious—*ex. gr.*, the addition of *Cholera infantum* and *Typho-malarial fever*: the transfer of *Leucocythemia* from Class B, Local Diseases, to Class A, General Diseases; of *Tonsilitis* from diseases of the Digestive System to diseases of the Glandular System, etc.

It is not claimed that this LIST is by any means perfect. After some twelve or fifteen years' labor, beginning in 1857, the committee which framed the "Provisional Nomenclature," and whose members "hold or have held the highest places as representative men in the Science of Medicine," concluded that "a good classification is a very difficult matter," and their work is still undergoing revision.

The physicians of Chicago are invited to revise the Classified List here offered. Suggestions of modification, addition or elision, received by the Registrar during the current year, will be made the basis of a Revised Classified List for the following year.

CLASSIFIED LIST OF CAUSES OF DEATH

Accepted by the DEPARTMENT OF HEALTH of the City of Chicago as warrant for the issue of the Permit for Burial.

A.—GENERAL DISEASES :

Febrile or Zymotic—

- Diphtheria—includes membranous croup.
- Malarial fever.
- Measles.
- Scarlet fever.
- Typhoid fever. [State whether contracted in Chicago or elsewhere.]
- Typho-malarial fever. [If typhoid symptoms predominate return as typhoid fever.]
- Whooping cough.

Diarrheal—

- Cholera infantum.
- Cholera morbus.
- Diarrhea.
- Diarrhea, infantile.
- Dysentery.

Venereal—

Syphilis. [State whether acquired or congenital.]

Septic—

Erysipelas. [Seat and cause. If traumatic, how produced.]

Puerperal septicemia. [No burial permit will be issued on a midwife's certificate of this cause without investigation by the Registrar. A physician should be called in at once in every case of puerperal fever, and the name of the attending midwife, if any, should be given in the physician's certificate, which will, of course, be accepted without question.]

Pyemia. } [State cause. If *not* consecutive to injury the
Septicemia. } fact should be so stated in the certificate.]

Parasitic—

Thrush.

Dietetic—

Alcoholism.

Drug habit—including cocaine, opium, etc.

Constitutional—

Anemia. [State cause.]

Cancer. [Specify part, as of breast, liver, stomach, womb.]

Diabetes.

Dropsy, general. [State cause. Local dropsies are to be referred to respective organs or cavities and causes stated.]

Leucocythemia.

Purpura.

Rheumatism.

Rickets.

Tuberculosis. [State nature of—as cerebral, hemoptysic, mesenteric, pulmonary, etc.]

Developmental—

Atelectasis.

Birth, abnormal or preternatural. [Describe manner of.]

Birth, premature or still. [Probable cause and fetal age.]

Birth, tedious. [State cause and duration of labor.]

Icterus neonatorum.

Marasmus, infantile.

Old age. [Accepted only if not assignable to definite disease.]

Teething. [Mode of death, as convulsions, paralysis, etc.]

Trismus nascentium.

B—LOCAL DISEASES :

Nervous System—

- Brain. [Specify disease, as Abscess, Congestion, Hemorrhage, Softening, etc.]
- Brain and membranes, inflammation of.
- Cerebro-spinal meningitis. [Not zymotic or epidemic.]
- Convulsions. [State cause.]
- Epilepsy.
- Insanity. [State variety and mode of death.]
- Laryngismus.
- Locomotor ataxia.
- Neurasthenia.
- Paralysis. [Variety and cause.]
- Spinal cord. [Specify disease of, as Progressive muscular atrophy, Sclerosis, etc.]
- Tetanus.

Circulatory System—

- Angina pectoris.
- Blood-vessel. [Specify vessel and disease, as Aneurism of aorta, Rupture of varicose vein, etc.]
- Heart. [Specify disease of—as Endocarditis, Fatty, Hypertrophy, Myocarditis, Pericarditis, Valve-disease, etc.]

Respiratory System—

- Asthma.
- Bronchitis.
- Croup, inflammatory or catarrhal. [Membranous croup is to be returned as Diphtheria.]
- Pleurisy. [If purulent—Empyema—so state.]
- Pneumonia.
- Pulmonary congestion.

Digestive System—

- Appendicitis.
- Gastro-enteritis.
- Hernia. [State variety, mode of death and operation, if any.]
- Intestines. [Specify disease, as Inflammation, Intussusception, Ulceration, etc.]
- Liver. [Specify disease, as Abscess, Cirrhosis, etc.]
- Peritonitis. [Specify variety, as Idiopathic, Traumatic, etc., and cause of last.]
- Stomach. [Specify disease, as Abscess, Inflammation, Ulceration, etc.]

Absorbent and Glandular System—

Glands and lymphatics. [Specify organs involved and nature of disease.]

Tonsillitis.

Urinary System—

Bladder. [Specify disease, as Abscess, Calculus, Inflammation, Ulceration, etc.]

Kidneys. [Specify disease, as Abscess, Acute inflammation, Chronic inflammation, etc.]

Prostate gland. [Specify disease, as Abscess, Hypertrophy, Inflammation, etc., and mode of death.]

Uremia. [Specify cause of and mode of death.]

Reproductive System—

Abortion, miscarriage. [Give cause, mode of death and period of gestation.]

Childbirth. [State conditions causing death, as Eclampsia, Hemorrhage, Placenta previa, Rupture of uterus, etc.]

Ovarian disease. [Specify variety, as Abscess, Acute or Chronic inflammation, Tumor, etc., mode of death and operation, if any.]

Pelvic abscess. [State cause.]

Pelvic peritonitis. [State cause, as Puerperal, Traumatic, etc., and cause of last.]

Uterine disease. [Specify nature and cause of.]

Osseous and Integumentary System—

Abscess. [Specify variety, as Articular, Cellular, Muscular, Osseous, and state location and cause if known.]

Bones, caries and necrosis. [Specify variety and bones or joints involved.]

Carbuncle.

Gangrene, senile. [Refer other forms of Gangrene to organ or seat and state cause.]

Pemphigus.

SUGGESTIONS AS TO THE CERTIFICATE OF CAUSE
OF DEATH.

In the settlement of life insurance and for many other purposes, the *duration* of the proximate cause of death is very frequently required to be stated, as also the character and duration of *complications* and *predisposing causes*. It will often prevent annoying delays or subsequent complications if these be fully stated in the original Certificate.

A *negative* statement is often as important as a positive one, as—Cancer of stomach; *Not hereditary, so far as known*:—Erysipelas of head; *Not traumatic*:—Gangrene of leg; *No definite cause*:—Metritis; *Not puerperal*, or *No assignable cause*:—Ovarian tumor; *No operation*, etc.

When death follows a Surgical Operation the *disease, injury or condition* which necessitated the operation should be specified.

DEATHS FROM VIOLENCE.

The fact is occasionally overlooked that all deaths from "violence, casualty or any undue means"—in the language of the Statute—are to be referred to the Coroner. This inadvertence sometimes causes embarrassment to the Physician and distress to the survivors, by interrupting or delaying the burial.

Deaths from Accident, Misadventure, Negligence, and all forms of violence—whether intentional or otherwise, should be reported to the Coroner, who alone is authorized to certify as to the cause and manner of death in these cases. The HEALTH DEPARTMENT is forbidden to issue Burial Permits for them except on the Coroner's authority.

Deaths from the following causes are all to be referred to the Coroner for Certificate. They include—

| | |
|---------------|---------------------|
| Asphyxiation, | Kick, |
| Bullet wound, | Lightning stroke, |
| Burning, | Poison, |
| Crushing, | Railroad or Street- |
| Drowning, | car accident, |
| Electricity, | Run over, |
| Explosion, | Scalding, |
| Exposure, | Strangulation, |
| Fall, | Suffocation. |
| Freezing, | |

—as well as any form of Homicide, Suicide or Sudden Death from unknown cause.

The members of the profession were prompt to appreciate this change, and their relations to the Bureau in this respect are more satisfactory than ever before. One important result has been to materially increase the value of the data recorded in the Bureau of Vital Statistics both as to accuracy and uniformity.

REGULATION OF UNDERTAKERS.

The second valuable improvement in the Bureau has been the regulation of Undertakers and their business.

In November, 1895, the diphtheria epidemic attained such proportions that it was deemed expedient to increase the corps of medical inspectors in order to protect the public against the ravages of the disease. Three of the inspectors so appointed were assigned to the duty of supervising the funerals of contagious diseases. That the lack of precaution and care in the preparation for burial of bodies dead from the infectious diseases was a source of spreading the contagion there can be no doubt. The early reports of the Funeral Inspectors of these conditions in our poorer districts were appalling, and a very brief experience showed the necessity of radical measures. An ordinance, drafted by the ASSISTANT COMMISSIONER, requiring undertakers to secure a license from the DEPARTMENT was secured from the City Council. This took effect November 26, 1895, and then for the first time it became possible to exercise efficient control over the preparation, removal, burial and cremation of the dead. With this new enactment the following is the legislation on this subject :

1. It is unlawful for any person or persons to remove a dead human body within the corporate limits of the city of Chicago, or to bury any human body within the corporate limits of the city, or to cremate or deposit any human body in any vault within the city limits, without first obtaining a permit so to do from the COMMISSIONER OF HEALTH.—*An Ordinance concerning the Burial of the Dead. Sec. 4958, Laws and Ordinances of Chicago, 1891.*

2. The penalty for removing, burying or cremating any dead human body without having first obtained the Permit, is a fine of \$100.—*Ibid, Sec. 4959.*

3. It is unlawful to pursue or exercise the business or occupation of preparing dead bodies for burial, and of managing funerals, without having first obtained a license therefor, granted by the Mayor, on the recommendation of

the COMMISSIONER OF HEALTH.—*An Ordinance for Licensing and Regulating Undertakers. In force November 26, 1895.*

4. It is unlawful to issue a permit for burial to any Undertaker who has not first obtained the license above prescribed.—*Ibid*, Sec. 4.

Based upon these provisions and for the protection of the public health against the spread of contagion and infection; for the decent and seemly conduct of burials; and for the conservation of the interests of society by securing proper supervision over the disposal of the remains of those whose deaths have been caused by violence, casualty or any undue means—the following Rules and Regulations, relating to the removal, burial or cremation of the dead, were established and published for the information and guidance of those concerned.

A pledge of compliance with these Rules and Regulations is necessary to secure the recommendation to the Mayor for the License prescribed by the ordinance of November 18, in force November 26, 1895. Violation of such pledge is ground for recommending revocation of the license.

RULES AND REGULATIONS.

1. In order to avoid unnecessary delay or interruption of the funeral, the Physician's Certificate of the Cause of Death shall be procured by the Undertaker and presented to the Registrar of Vital Statistics, Room 4, City Hall, at the earliest practicable moment after death.

Printed forms for the Report of Death and Physician's Certificate are furnished by the Registrar, free of charge to any Licensed Undertaker. Full instructions for the information of the Undertaker are printed on the back of this form, and no other form of Report will be accepted as the basis for the Burial Permit. This is necessary in order to secure accuracy and uniformity in the records, which the DEPARTMENT is required to keep.

2. Until the Permit is procured, as prescribed by the Ordinance, no dead body shall be removed for any purpose whatsoever, except in case of death elsewhere than at last place of residence. In such case the body may be removed to last place of residence, if this is within the limits of the city; or, if the deceased is a non-resident or without friends

or relatives, the body may be removed to one of the designated morgues or to the establishment of any Licensed Undertaker. Such removal, if the death be from a natural cause, will be authorized by the HEALTH DEPARTMENT; but if from casualty, violence or any undue means, the removal can be authorized only by the Coroner or under the supervision of the Police Department.

This rule applies equally to bodies brought into the city from beyond the city limits by rail or otherwise; and the burial or cremation of such body without a permit so to do, issued by the COMMISSIONER OF HEALTH, is a violation of the ordinance, punishable by a fine of \$100.

3. The body of one dead from Asiatic Cholera, Diphtheria, Measles, Membranous Croup, Puerperal Fever, Scarlet Fever, Smallpox, Typhoid Fever or Typhus, shall be prepared for burial and the burial shall be conducted under the direct supervision of an officer of the HEALTH DEPARTMENT and in accordance with the following instructions:

a. Upon being called to the care of a body dead from any of the diseases above specified the Undertaker shall immediately notify the HEALTH DEPARTMENT by telephone, Main 447, without waiting for the Physician's certificate. He shall at the same time state whether the services of a DEPARTMENT disinfectors are required, or whether he assumes the responsibility of thorough disinfection without the assistance of the DEPARTMENT.

b. Before entering the death room the Undertaker shall put on a rubber garment closely fastened at the throat and wrists to protect his clothing, and a rubber cap to protect his hair, from infection and contagion. The windows of the room must be thrown open and the entire apartment and its belongings thoroughly sprayed with an approved disinfectant.

c. If the body is not to be embalmed, then, before it is moved or handled for other treatment, the orifices of the nose and throat are to be packed with absorbent cotton saturated with an approved disinfectant or thoroughly cleansed by injection of such disinfectant; after which it may be bathed, dressed and encoffined, either wrapped in a disinfectant sheet or packed in absorbent cotton saturated with the disinfectant. If the face is left exposed it must be freely sprayed with the disinfectant and the coffin lid put on at once and securely fastened.

d. Before removal from the death-room the exterior of the coffin must be sprayed or sponged with the disinfectant. It may then be removed to a room previously prepared by

thorough ventilation—or, if necessary, by disinfection—and from which all unnecessary furniture and other articles have been removed. As soon as the body is removed from the death-chamber the room must be locked up and no one allowed to enter, except the disinfectors, until the room and its belongings have been properly treated and made safe.

e. The coffin used for such a case shall be absolutely water-tight and air-tight, so as to prevent leakage of poisonous or offensive fluids or gases during the conduct of the burial. A solution of bichloride of mercury, in the proportion of one ounce to the gallon of water, shall be the standard of the "approved disinfectant;" if any other disinfectant is used it must first be determined by the City Bacteriologist and Chemist to be equal in potency to the bichloride solution, when it will be accepted by the DEPARTMENT as "approved."

4. The burial of one dead of Diphtheria, Measles, Membranous Croup, Scarlet Fever, Smallpox or Typhus Fever shall be strictly private. Children especially shall be excluded from such funerals, and also from the premises where such a death has occurred until these have been properly disinfected and pronounced safe and free from contagion by the burial inspector in charge.

5. Bodies prepared in accordance with the instructions in Rule 3, under the supervision of one of the staff of the DEPARTMENT OF HEALTH, may be attended for burial with public services upon a special permit from the DEPARTMENT, based upon a certificate from the supervising officer that the instructions have been complied with and that the surroundings are such as to make public services safe and proper.

6. Any Undertaker who files with the DEPARTMENT satisfactory evidence of his knowledge of the principles and practice of embalming and preparing the dead for safe and inoffensive burial, of the use of antiseptics and disinfectants in the treatment of apartments, clothing and bedding in case of death from a contagious or infectious disease, and of the other precautions to be observed in the conduct of the burial of such a case; and who also files with this evidence a written guarantee to use such knowledge and enforce such precautions in all proper cases, shall be exempt from the supervision prescribed in Rule 3, and shall be entitled to the special permit for a public funeral without the certificate prescribed in Rule 5.

"Satisfactory evidence" shall consist (1) of a certificate from a reputable medical college of attendance upon a course of instruction, and of having passed a satisfactory examination

in anatomy and chemistry, the principles and practice of embalming and preparing the dead for burial and the use of antiseptics and disinfectants; or (2) a certificate of competent professional knowledge and good reputation from a representative organization of Undertakers or Funeral Directors; or (3) a satisfactory examination under the supervision of the DEPARTMENT OF HEALTH.

Any Undertaker who fails to establish his professional competency and reputation by one of the foregoing methods shall be subject to the direct supervision of one of the staff of the DEPARTMENT in his conduct of the burial of one dead of any of the diseases specified in Rule 3, and the burial permit to such Undertaker will be issued only upon this condition.

Undertakers who furnish the "satisfactory evidence" herein prescribed and who guarantee to embalm arterially all bodies dead from the diseases specified in Rule 3, shall be exempt from the requirement to use water-tight and air-tight coffins, except in smallpox and typhus fever cases.

7. No Undertaker shall be a party to or shall assist in a burial or funeral in violation of the foregoing requirements; but shall explain to the family the necessity for these precautions against the spread of contagion and infection in the interest of the living; and shall further explain that violation or neglect of these requirements will work suspension or revocation of his license.

8. Every Undertaker who learns of a death from any of the diseases specified in Rule 3, shall at once notify the DEPARTMENT OF HEALTH by telephone, Main 447. This notification shall be given without waiting for the Physician's certificate—the object being to secure the proper measures of disinfection and other precaution with as little delay as possible in order to prevent any spread of the contagion or infection.

9. When called to the care of any dead body the Undertaker shall first ascertain whether death has been caused by violence, casualty or any undue means—a list of which causes is printed on the back of the Report of Death. If the death has been so caused the case shall be immediately referred to the Coroner, and no process of embalming, or injection of any preservative fluid, or incision upon the body, shall be made until so authorized by that officer. The ends of justice have been frequently frustrated and post-mortem examinations made impracticable by the embalming process in such cases.

Under the ordinance of November 26, 1895, Undertakers holding licenses upon the recommendation of the COMMISSIONER OF HEALTH are quasi-city officers, under the direct control of the DEPARTMENT OF HEALTH and empowered by it with authority to secure such precautions and to enforce such rules and regulations as may be necessary for the safe and inoffensive disposal of the remains of the dead. They are hereby enjoined and instructed to exercise this authority and to use their influence to this end.

Whenever the opportunity is offered they should point out the dangers of certain too-common customs—such, for example, as kissing the lips of one dead from such highly contagious diseases as Diphtheria or Scarlet Fever; and should endeavor to secure in the death notice the publication of the cause of death in these cases, so as to put attendants at funerals on their guard against unnecessary exposure to contagion.

In response to the appeal and representation of the COMMISSIONER OF HEALTH that the “absolute forbidding” of the transportation by rail of bodies dead of contagious diseases works a serious hardship to the poor—by compelling them to hire private conveyances, sometimes for long distances—the State Board of Health has modified its prohibitory rule as follows :

“*Provided*, That the transportation of those dead of Diphtheria or Scarlet Fever, by rail, to any cemetery within or adjacent to the city limits of any city or town, is hereby authorized, on a special permit of the health authorities of such city or town, based upon evidence that the body has been prepared and encoffined in accordance with Rule Two (2), following.”

Rule Two (2), herein referred to, is substantially the same as Rule 3 of these Rules and Regulations, and upon compliance therewith the “special permit” authorized by the State Board will be issued to any licensed Undertaker who has complied with the requirements of Rule 6, above.

Revised, approved and in force February 25, 1896.

One of the immediate results of this action was the formation of an association by a large number of the Undertakers with the object of education and instruction. Under its auspices a course of lectures with practical demonstration is given annually free to members in each of the following

branches: Anatomy, chemistry, bacteriology, disinfection and embalming. These lectures are given by experienced teachers of the recognized medical colleges of this city.

Under the Rules and Regulations, all bodies dead from the diseases specified in Rule 3 are prepared for burial and the funeral is conducted under the direct supervision of an officer of the HEALTH DEPARTMENT in accordance with Rules 3 and 4, except as prescribed in Rule 6, under which, as a test of qualifications, an examination is conducted by a Board appointed by the DEPARTMENT, the functions, duties and methods of the Board being as here detailed:

The Board meets on call of the Chairman at time and place designated. Candidates for examination fill out application blanks, obtained from the Registrar of Vital Statistics. When the candidate is ready for examination he files his application with the Secretary of the Board, accompanied by the examination fee of \$5.00. A class is examined whenever not less than six (6) candidates announce their readiness for examination, and due notice of the time and place of examination is given to each candidate by the Secretary.

The examination consists of two parts, (a) a written examination, in which applicants answer ten (10) questions in each of the branches—anatomy, disinfection and embalming; (b) a practical demonstration on the cadaver. Of the ten questions in each branch of the written examination the candidate draws seven (7) questions by lot, to which the Examiner adds three (3) more selected by himself after considering the questions drawn by the candidate. Should the candidate draw similar or duplicate questions the Examiner may require him to repeat the drawing as to such similar or duplicate questions—the object being to secure a fair and impartial test of the candidate's qualifications. For the practical demonstration upon the cadaver each candidate provides himself with the following instruments: One (1) pump or embalming syringe; four (4) arterial tubes, assorted sizes; one (1) trocar; one (1) tenaculum; two (2) scalpels; needle and thread.

To candidates who successfully pass the examination, with a general average of not less than seventy-five (75) per cent., a Diploma or Certificate of Proficiency as a Funeral Director and Embalmer is issued under the authority of the COMMISSIONER OF HEALTH and with the approval of the

Mayor of the City. Candidates who fail to attain the required percentage may apply for re-examination, without payment of additional fee, at any subsequent regular examination.

Following are the questions submitted :

FOR THE EXAMINATION IN ANATOMY.

1. What is a vein, and how does the flow of blood in that differ from the flow of blood in an artery ?
2. Where does the blood accumulate after death ?
3. What organs of practical importance in your profession are contained in the abdominal cavity ?
4. What separates the thoracic cavity from the abdominal cavity ?
5. Name the principal cavities of the trunk.
6. What are the objections, dangers and difficulties in raising the common carotid and how would you meet and overcome them ?
7. Describe the location of the heart.
8. Which side of the heart contains venous blood ?
9. What organs of practical importance in your profession are contained in the thoracic cavity ?
10. Of what practical importance to an Undertaker is the fact that the blood accumulates in certain parts of the body after death ?
11. On cutting down upon the usual location of an artery and failing to find it, what would you do ?
12. What artery is most often found wanting in its usual location ?
13. What is the weight of the average or "normal" man ?
14. Name the principal arteries used in embalming ?
15. How many pounds of blood will drain from the body of an average or "normal" man ?
16. Locate the liver.
17. Locate the stomach.
18. What is the peritoneum ?
19. In what part of the trunk will you find the intestines ?
20. Locate the bladder.
21. Locate the common carotid artery.
22. Locate the axillary artery.
23. Having cut for an artery how do you distinguish it from a nerve or a vein ?
24. Why do you inject the arteries instead of the veins ?

25. In injecting through the heart, which cavity would you select, and why?
 26. What organs of practical interest to an Undertaker are contained in the principal cavities of the trunk?
 27. Where does the aorta begin?
 28. How do you inject the lungs?
 29. How would you draw water from a subject with abdominal or general dropsy?
 30. What vessels accompany and are inclosed in the sheath with the brachial artery?
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FOR THE EXAMINATION IN DISINFECTION AND THE
DISINFECTANTS.

NOTE.—For the purpose of this examination infection and contagion are considered as the same thing.

1. Explain what is meant by disinfection.
2. What are the most important recent improvements in the process of disinfecting apartments, etc.?
3. Do you know of any case of diphtheria being contracted through a funeral? State what precautions should have been taken.
4. What do you consider a good disinfectant, and in what strength would you use it?
5. According to the laws of Illinois what bodies cannot be shipped by rail?
6. What diseases are liable to be communicated by clothes, bedding, etc.?
7. If called to a case of death from an infectious disease what precautions would you use?
8. What is necessary to be done in case a body is shipped by rail?
9. What cases are liable to cause blood poisoning in the Undertaker?
10. Name two efficient deodorizers.
11. What mode do you consider to be more healthful for the community—burial in an air-tight metallic casket or in a wooden casket, and why?
12. State how you would prepare the body, disinfect, and conduct the funeral in case of death from diphtheria.
13. What diseases do you consider to be infectious or contagious?
14. Describe some other mode of preserving bodies than that of embalming.
15. In deaths from what diseases are public funerals not allowable?

16. What would you do with the clothes, bedding, etc., in cases of death from diphtheria, scarlet fever, etc.?

17. What precautions would you take in transferring a body, which had been dead one year, from one cemetery to another?

18. Would you make any distinction between bodies dead from diphtheria and those dead from membranous croup?

19. Do you allow kissing of bodies dead from a contagious or infectious disease—if not, why?

20. Is a private Undertaker allowed to conduct a small-pox funeral?

21. In deaths from infectious diseases how would you apply disinfectants?

22. A body has been in the river for ten days in July, and is very offensive: What means would you take to overcome the odor?

23. What instructions would you give the family in case of death from one of the infectious diseases?

24. What means do you use to protect yourself and your family after conducting the funeral of one dead from an infectious disease?

25. Bodies dead from what diseases are most apt to decay rapidly, regardless of the time of year?

26. A person dies during hot weather from suspected poisoning, in which it is necessary to have the stomach analyzed: State how you would preserve the body until this can be done.

27. State briefly the advantages and disadvantages of cremation as a means of disposing of the dead.

28. What is the difference between a disinfectant and a deodorizer?

29. Do you consider an ordinary embalming fluid to be a disinfectant?

30. What is the purpose of disinfection?

FOR THE EXAMINATION IN EMBALMING.

1. What is embalming and what is its object?

2. How do you raise each of the following named arteries—

The common carotid?

The brachial?

The femoral?

The radial?

3. What artery do you consider the best to use in embalming and why do you so consider it?

4. How do you purge the stomach?
5. How do you inject the stomach?
6. How do you remove gases from the intestines?
7. What process of embalming do you consider the best—cavity or arterial, and why?
8. How do you treat a subject who has died of sun-stroke?
9. How do you treat a subject who has died of apoplexy?
10. How do you treat a subject who has died of diphtheria?
11. How do you treat a subject who has died of cholera?
12. How do you treat a subject who has died of consumption?
13. How do you treat a subject who has died of drowning?
14. How do you remove discolorations?
15. How do you draw the water from a general dropsical subject?
16. Give the best tests of death.
17. How would you embalm a subject to ship to a foreign country?
18. What different methods do you employ to draw the blood?
19. Why do you inject the arteries, and why not the veins?
20. Do you use bichloride of mercury in your embalming fluid on a subject who has died of an infectious disease? If so, in what proportion?
21. Do you remove blood before or after injecting?
22. Describe the Barnes process?
23. Describe the eye process?
24. Of what chemicals is your embalming fluid composed, and in what proportions?
25. What amount of fluid is necessary to embalm a body of average size?
26. What causes purging from the mouth and nose and how do you stop it?
27. How do you remove blood from the brain cavity?
28. How do you wash out the blood from the arteries and veins?
29. In what cases is it necessary to draw the blood from the body?
30. What do you use to prevent mould?

At the close of 1896 a total of 318 Undertakers had taken out the prescribed license, and of this number more than 200 have qualified themselves so as to be exempt from the supervision prescribed in Rule 3, and have furnished the "satisfactory evidence" specified in Rule 6.

RECORDS OF DEATHS.

Prior to the year 1891 the records of deaths are not arranged in alphabetical order and we cannot make a search extending beyond that period without considerable expense to the city. The total number of inquiries of death received by mail during 1896 was 510. In many instances we were unable to make the search at all. In view of the foregoing facts I respectfully recommend that a card index be made of our records. The amount thus saved in the clerical force would compensate for the expense of making this index in a comparatively short time.

Until January, 1896, no record had ever been made in this office of bodies that had died outside of the city but shipped here for interment. Since that time we have recorded all such deaths in a special register provided for that purpose. The number of interments so entered for the year 1896 was 497.

Through the kindness of the cemetery authorities we were enabled to extend this record, in an incomplete manner, as far back as 1891.

STATISTICS OF MORTALITY.

In the last ten years Chicago's total death rate from all causes per 1000 of population has been reduced from 20.27 to 14.36, the decrease being in direct proportion to its sanitary improvement. This shows a reduction of about 30 per cent. But while this result obtains the decrease has not been uniform; in fact, when we compare each disease with the

total number of deaths from all causes, we find the mortality rate from some diseases has increased. Taking the total number of deaths each year as a standard of comparison, we can see at once the exact relation each disease bears to the total number of deaths, thus avoiding any discrepancies that may arise from faulty census enumeration of population. The points of interest to the DEPARTMENT OF HEALTH and to the public are: 1. Relation of disease to total number of deaths. 2. Ratio of increase or decrease. 3. Cause of increase or decrease.

CONSUMPTION.—The average annual death rate from consumption covering a period of 40 years is 9.03 per cent. of the total number of deaths. For the last 10 years it is 8.08 per cent.; for the first half of the last decade 8.65 per cent., and for the five years ending with 1896, the mortality rate from consumption was 8.96 per cent. of the total number of deaths. The percentage of this disease of the total mortality for the year 1896 was 9.95, the highest rate it has attained since 1862 when it reached 12.27. The increase of the mortality from this disease led Dr. REILLY, ASSISTANT COMMISSIONER, to prepare a circular on the contagious nature and prophylactic treatment of the disease. This was widely distributed throughout the city; but, unfortunately, this city, as well as the entire country, has been so flooded with circulars of no practical importance that in many instances this valuable paper was passed unnoticed. As the contagious nature of the disease becomes more widely recognized by the laity and the necessary sanitary precautions are observed the mortality rate will diminish.

CHOLERA INFANTUM.—The disease registering the next largest fatality is cholera infantum. The average percentage of total mortality for 40 years from this disease is 7.36. The percentage of total number of deaths for 10 years ending with 1896, is 5.65. For the first half of the last decade it is

5.29 and for the latter half of this period 6.02. This advance is due to the increased rate in 1894 when it reached 8.64 per cent. of total mortality. In July of that year there were 797 deaths from cholera infantum, and a circular on the "Hot Weather Care of Infants and Young Children" was prepared by Dr. REILLY and distributed by the thousand. The result was gratifying, indeed, for in July, 1895, there were but 524 deaths from this disease. With the hope of further reducing this death rate in 1896, a house-to-house canvass was made in the poorer districts by the Medical Inspectors, and such instruction and medical aid given as were deemed necessary. The result was that in July last there were but 469 deaths. About 66 per cent. of these were under one year of age. The systematic work of going into unsanitary, overcrowded districts where the heavy death rate from cholera infantum occurs, has reduced the annual percentage of mortality from this cause from 8.64 to 5.18 in two years. This reduction has been attained notwithstanding that it might have been expected there would have been shown a tendency to increase owing to the quality of the public water supply.

PNEUMONIA.—For the last 40 years pneumonia has averaged 5.45 per cent. of the total mortality. The percentage of deaths from this disease had been increasing until 1891 when it constituted 10.44 of total number of deaths. The average percentage of total mortality for the last 10 years from pneumonia was 8.39; for first half of last decade, 8.07; last half, 8.71. The total number of deaths from this disease in 1895 was 2359; in 1896, 2141, showing a slight decrease from the preceding year—the general tendency to increase probably being due to toxæmia.

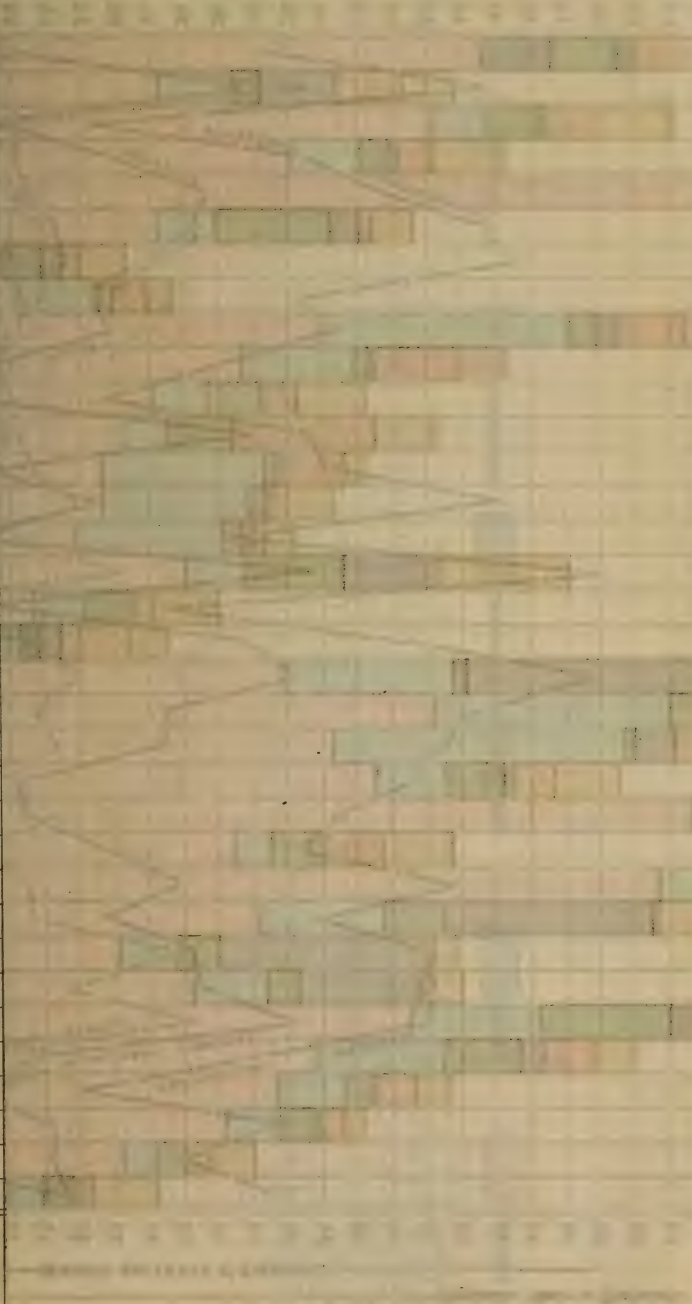
DIPHThERIA.—The average percentage from diphtheria to the total mortality from all causes for 40 years is 4.07. For the last decade, 4.89; for first half of this period, 4.56; last half, 5.21. The highest rate this disease ever reached in

Chicago was in 1880, when it caused 8.89 per cent. of total mortality. In October, 1895, there were 240 deaths from this disease. The epidemic increased to such an extent that the services of a corps of antitoxin specialists were secured and Dr. E. P. MURDOCK was placed in charge. The result was immediate. In November there were only 201 deaths from this disease, and in December, which as a rule furnishes the largest death rate, it had been reduced to 173. This work was continued through 1896, preventing the usual rise in mortality rate from this cause, there being but 116 in October as against 240 of the preceding year.

TYPHOID FEVER.—The average number of deaths from typhoid to total mortality for 40 years is 3.46 per cent. For the last 10 years, 3.48; for the first half of last decade, 3.86; for the last half of last decade, 3.11. This is a decided improvement over 1891 when this disease constituted 7.20 per cent. of total mortality. That the DEPARTMENT has safeguarded the city against the most common source of this infection, namely, its water supply, is shown by the above figures. By faithfully following the system begun by COMMISSIONER REYNOLDS in 1893, of taking samples of water for analysis from each source of supply at short intervals and notifying the public when it was safe, usable or dangerous, the mortality rate from this disease has been reduced almost one-half. This is not alone true of typhoid fever, for all diarrheal diseases show a similar reduction.

There has been no smallpox since October, 1895, owing to the wholesale vaccination begun by COMMISSIONER REYNOLDS in April, 1893. Since the regulation of midwives the mortality from puerperal fever has been materially reduced. In short, all diseases the virulence of which is increased by unsanitary conditions have diminished during the past few years, as shown by the accompanying tables and diagrams prepared by Dr. C. ST. C. DRAKE, Assistant to the Registrar.

| WARDS | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 |
|-------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|-------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|



TOTALS

11 619 226

23 224

1

14 30

11

43 700

1

0 012

1

101 00

11

120 000

1

0 004

1

24 00

1

1

1

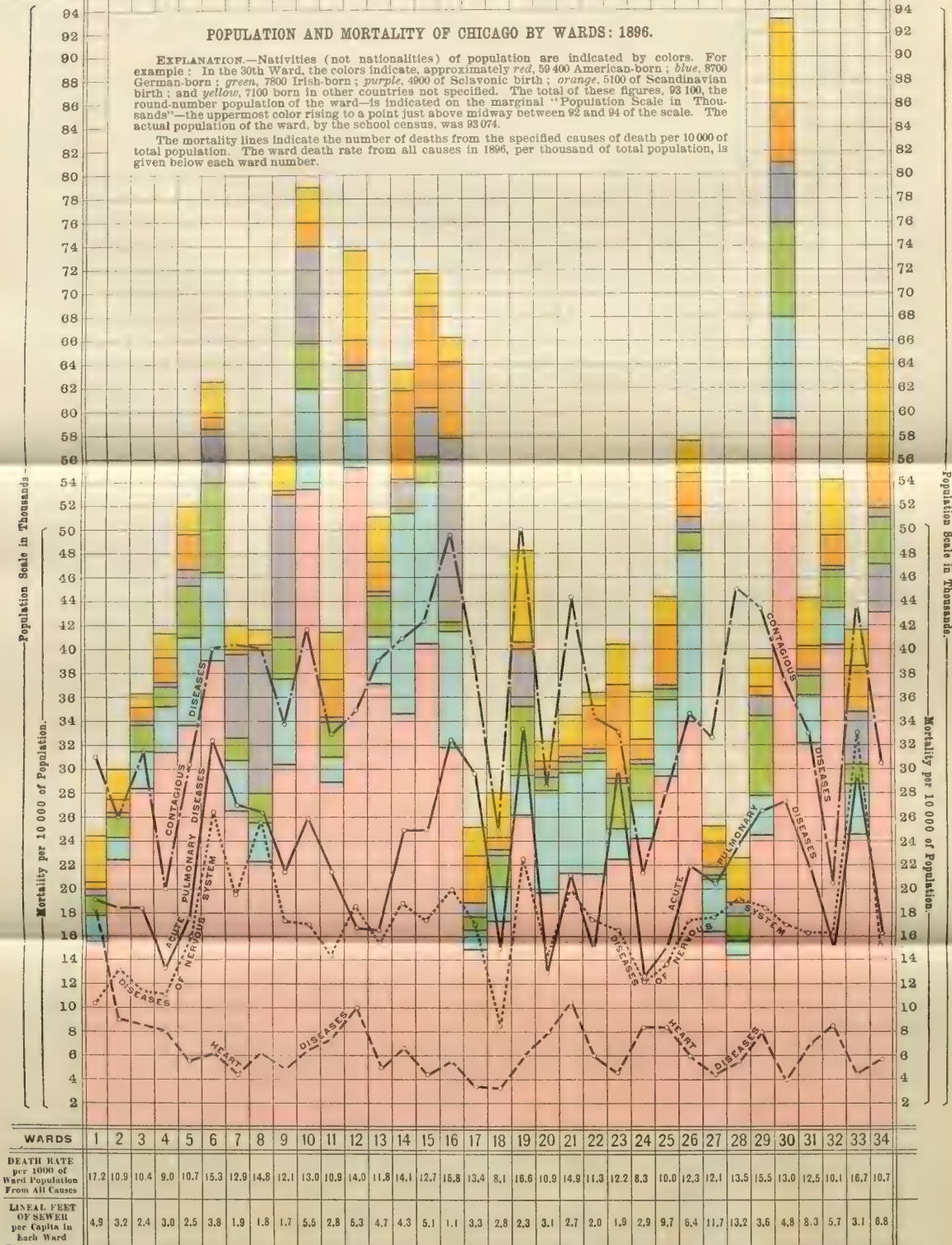
1

WARDS 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34

POPULATION AND MORTALITY OF CHICAGO BY WARDS: 1896.

EXPLANATION.—Nativities (not nationalities) of population are indicated by colors. For example: In the 30th Ward, the colors indicate, approximately red, 59,400 American-born; blue, 8,700 German-born; green, 7,600 Irish-born in other countries not specified. The total of these figures, 93,100, the round-number population of the ward—is indicated on the marginal "Population Scale in Thousands"—the uppermost color rising to a point just above midway between 92 and 94 of the scale. The actual population of the ward, by the school census, was 93,074.

The mortality lines indicate the number of deaths from the specified causes of death per 10,000 of total population. The ward death rate from all causes in 1896, per thousand of total population, is given below each ward number.



AMERICAN GERMAN IRISH SCLAVONIC SCANDINAVIAN ALL OTHER

POPULATION AND DEATHS BY WARDS DURING 1896, AT ALL AGES, UNDER 1 YEAR OF AGE, BETWEEN 1 AND 5 YEARS, AND OVER 5 YEARS.

| WARDS. | ALL AGES. | | | UNDER 1 YEAR. | | | BETWEEN 1 AND 5 YEARS. | | | OVER 5 YEARS. | | |
|--------------------------|----------------------------|------------------------|----------------------|--------------------------------|----------------------------|----------------------|---------------------------------------|-------------------------------------|----------------------|--------------------------------|----------------------------|----------------------|
| | Total population all ages. | Total deaths all ages. | Death rate per 1000. | Total population under 1 year. | Total deaths under 1 year. | Death rate per 1000. | Total population between 1 and 5 yrs. | Total deaths between 1 and 5 years. | Death rate per 1000. | Total population over 5 years. | Total deaths over 5 years. | Death rate per 1000. |
| Ward First..... | 24 836 | 428 | 17.26 | 197 | 40 | 203.05 | 764 | 32 | 41.88 | 23 875 | 356 | 14.96 |
| Second..... | 29 937 | 326 | 10.90 | 352 | 85 | 241.48 | 1 234 | 31 | 25.12 | 28 351 | 210 | 7.42 |
| Third..... | 36 063 | 377 | 10.47 | 401 | 76 | 189.52 | 2 097 | 44 | 20.98 | 33 565 | 237 | 7.06 |
| Fourth..... | 41 225 | 373 | 9.05 | 587 | 55 | 93.69 | 2 214 | 30 | 13.55 | 38 424 | 288 | 7.49 |
| Fifth..... | 51 974 | 557 | 10.73 | 1 491 | 171 | 114.69 | 5 220 | 57 | 10.92 | 45 263 | 329 | 7.27 |
| Sixth..... | 62 742 | 959 | 15.30 | 2 191 | 370 | 168.87 | 7 259 | 165 | 22.73 | 53 292 | 424 | 7.96 |
| Seventh..... | 41 990 | 543 | 12.96 | 1 381 | 213 | 154.24 | 4 602 | 110 | 23.90 | 36 007 | 220 | 6.11 |
| Eighth..... | 41 736 | 621 | 14.89 | 1 331 | 212 | 159.28 | 4 676 | 106 | 22.65 | 35 729 | 303 | 8.48 |
| Ninth..... | 56 390 | 685 | 12.16 | 1 696 | 236 | 139.15 | 5 678 | 118 | 20.78 | 49 016 | 331 | 6.75 |
| Tenth..... | 79 063 | 1 030 | 13.04 | 2 669 | 375 | 140.50 | 9 311 | 210 | 22.55 | 67 083 | 445 | 6.63 |
| Eleventh..... | 45 523 | 453 | 10.92 | 612 | 94 | 153.56 | 2 344 | 57 | 24.32 | 38 567 | 302 | 7.83 |
| Twelfth..... | 73 507 | 1 031 | 14.03 | 1 280 | 189 | 147.66 | 4 530 | 82 | 18.10 | 67 697 | 760 | 11.23 |
| Thirteenth..... | 51 053 | 606 | 11.88 | 1 164 | 165 | 141.75 | 4 261 | 93 | 21.83 | 45 628 | 348 | 7.63 |
| Fourteenth..... | 63 734 | 899 | 14.11 | 2 010 | 251 | 125.00 | 7 149 | 149 | 20.84 | 54 575 | 499 | 9.14 |
| Fifteenth..... | 71 762 | 914 | 12.75 | 2 449 | 314 | 128.22 | 8 654 | 158 | 18.26 | 60 659 | 442 | 7.29 |
| Sixteenth..... | 66 334 | 1 049 | 15.82 | 2 602 | 426 | 163.72 | 8 170 | 204 | 24.97 | 55 562 | 419 | 7.56 |
| Seventeenth..... | 25 135 | 337 | 13.43 | 725 | 125 | 172.41 | 2 312 | 58 | 25.09 | 22 098 | 154 | 6.97 |
| Eighteenth..... | 27 886 | 226 | 8.13 | 268 | 68 | 253.73 | 953 | 40 | 41.97 | 26 665 | 118 | 4.43 |
| Nineteenth..... | 48 280 | 804 | 16.63 | 1 480 | 246 | 166.22 | 3 863 | 160 | 41.42 | 42 937 | 398 | 9.27 |
| Twentieth..... | 32 952 | 356 | 10.95 | 706 | 91 | 128.89 | 2 773 | 57 | 20.56 | 29 113 | 208 | 7.14 |
| Twenty-first..... | 34 029 | 507 | 14.91 | 763 | 121 | 156.58 | 2 782 | 50 | 17.97 | 30 484 | 336 | 11.02 |
| Twenty-second..... | 36 497 | 412 | 11.32 | 786 | 121 | 153.94 | 2 945 | 48 | 16.30 | 32 766 | 243 | 7.42 |
| Twenty-third..... | 40 199 | 492 | 12.27 | 1 080 | 151 | 139.82 | 3 889 | 93 | 23.91 | 35 230 | 248 | 7.04 |
| Twenty-fourth..... | 36 157 | 300 | 8.33 | 481 | 57 | 118.50 | 1 515 | 27 | 17.82 | 34 161 | 216 | 6.32 |
| Twenty-fifth..... | 44 674 | 450 | 10.09 | 990 | 129 | 130.30 | 3 783 | 52 | 13.75 | 39 901 | 269 | 6.74 |
| Twenty-sixth..... | 57 815 | 715 | 12.37 | 1 966 | 238 | 121.06 | 7 027 | 103 | 14.66 | 48 822 | 374 | 7.66 |
| Twenty-seventh..... | 25 164 | 305 | 12.15 | 772 | 97 | 125.65 | 3 031 | 59 | 19.47 | 21 361 | 149 | 6.98 |
| Twenty-eighth..... | 22 701 | 308 | 13.57 | 730 | 109 | 149.32 | 2 915 | 60 | 20.58 | 19 056 | 139 | 7.30 |
| Twenty-ninth..... | 39 334 | 612 | 15.57 | 1 279 | 207 | 161.85 | 4 514 | 101 | 22.23 | 33 511 | 304 | 9.07 |
| Thirtieth..... | 93 154 | 1 210 | 13.00 | 3 226 | 402 | 124.61 | 10 479 | 208 | 19.85 | 79 449 | 590 | 7.43 |
| Thirty-first..... | 44 391 | 555 | 12.53 | 1 187 | 190 | 160.07 | 4 157 | 60 | 14.43 | 39 017 | 315 | 8.07 |
| Thirty-second..... | 54 134 | 551 | 10.18 | 810 | 95 | 117.28 | 3 002 | 30 | 10.00 | 50 322 | 426 | 8.47 |
| Thirty-third..... | 41 485 | 695 | 16.79 | 1 491 | 280 | 187.80 | 4 929 | 127 | 25.77 | 35 065 | 288 | 8.22 |
| Thirty-fourth..... | 65 508 | 707 | 10.79 | 1 750 | 195 | 111.43 | 6 488 | 104 | 16.03 | 57 270 | 408 | 7.12 |
| Public Institutions..... | 2 864 | ..... | ..... | ..... | 318 | ..... | ..... | 118 | ..... | ..... | 2 428 | ..... |
| TOTALS..... | 1 619 226 | 23 257 | 14.36 | 42 903 | 6 512 | 151.80 | 149 550 | 3 201 | 21.40 | 1 426 773 | 13 544 | 9.49 |

REPORT OF DEPARTMENT OF HEALTH

DEATHS IN EACH WARD DURING 1896, BY SEASONS. QUARTERS: FIRST—JANUARY, FEBRUARY, MARCH;
SECOND—APRIL, MAY, JUNE; THIRD—JULY, AUGUST, SEPTEMBER;
FOURTH—OCTOBER, NOVEMBER, DECEMBER.

| WARD | FIRST QUARTER. | | | | | SECOND QUARTER. | | | | | THIRD QUARTER. | | | | | FOURTH QUARTER. | | | | |
|---------------------|---------------------------------------|---------------------------------|------------------------------|---------------------------------|---------------------------------------|---------------------------------|------------------------------|---------------------------------|---------------------------------------|---------------------------------|------------------------------|---------------------------------|---------------------------------------|---------------------------------|------------------------------|---------------------------------|---------------------------------------|---------------------------------|------------------------------|---------------------------------|
| | Per 1000 of total popu- lation. | Per 1000 of year. under 1 | Per 1000 of 1 to 5 years. | Per 1000 of over 5 years. | Per 1000 of total popu- lation. | Per 1000 of year. under 1 | Per 1000 of 1 to 5 years. | Per 1000 of over 5 years. | Per 1000 of total popu- lation. | Per 1000 of year. under 1 | Per 1000 of 1 to 5 years. | Per 1000 of over 5 years. | Per 1000 of total popu- lation. | Per 1000 of year. under 1 | Per 1000 of 1 to 5 years. | Per 1000 of over 5 years. | Per 1000 of total popu- lation. | Per 1000 of year. under 1 | Per 1000 of 1 to 5 years. | Per 1000 of over 5 years. |
| First..... | 3.59 | 65.99 | 7.86 | 2.95 | 5.65 | 65.99 | 22.25 | 4.62 | 4.19 | 60.92 | 9.16 | 3.57 | 3.83 | 10.15 | 2.61 | 3.82 | 3.83 | 10.15 | 2.61 | 3.82 |
| Second..... | 2.71 | 48.30 | 5.67 | 2.02 | 3.01 | 82.38 | 11.35 | 1.66 | 2.52 | 79.55 | 4.86 | 1.48 | 2.64 | 31.23 | 3.24 | 2.26 | 2.64 | 31.23 | 3.24 | 2.26 |
| Third..... | 3.17 | 49.88 | 6.68 | 2.40 | 2.78 | 42.39 | 4.77 | 2.18 | 2.42 | 54.86 | 5.24 | 1.62 | 2.11 | 42.39 | 4.29 | 1.46 | 2.11 | 42.39 | 4.29 | 1.46 |
| Fourth..... | 2.62 | 17.04 | 4.52 | 2.30 | 2.06 | 30.66 | 4.97 | 1.46 | 2.02 | 30.66 | 1.81 | 1.56 | 2.35 | 15.33 | 2.25 | 2.03 | 2.35 | 15.33 | 2.25 | 2.03 |
| Fifth..... | 2.85 | 27.50 | 4.02 | 1.90 | 2.71 | 28.84 | 1.92 | 1.95 | 4.56 | 40.24 | 2.49 | 1.39 | 2.54 | 18.11 | 2.49 | 1.99 | 2.54 | 18.11 | 2.49 | 1.99 |
| Sixth..... | 3.52 | 35.14 | 5.37 | 1.97 | 4.06 | 47.92 | 5.23 | 2.10 | 4.56 | 57.51 | 8.13 | 1.90 | 3.14 | 28.30 | 4.00 | 1.99 | 3.14 | 28.30 | 4.00 | 1.99 |
| Seventh..... | 3.01 | 34.76 | 5.65 | 1.45 | 3.48 | 39.83 | 5.21 | 1.86 | 4.11 | 54.31 | 8.48 | 1.61 | 2.36 | 25.34 | 4.56 | 1.19 | 2.36 | 25.34 | 4.56 | 1.19 |
| Eighth..... | 3.52 | 39.08 | 4.05 | 2.13 | 3.67 | 47.33 | 4.06 | 1.99 | 4.25 | 51.09 | 7.91 | 2.02 | 3.45 | 21.78 | 6.03 | 2.35 | 3.45 | 21.78 | 6.03 | 2.35 |
| Ninth..... | 3.04 | 34.79 | 4.40 | 1.77 | 3.07 | 31.84 | 5.11 | 1.84 | 3.54 | 45.40 | 8.10 | 1.55 | 2.52 | 27.12 | 3.17 | 1.59 | 2.52 | 27.12 | 3.17 | 1.59 |
| Tenth..... | 3.73 | 36.34 | 6.02 | 2.12 | 3.11 | 34.10 | 5.26 | 1.58 | 3.77 | 46.08 | 6.87 | 1.65 | 2.42 | 23.96 | 4.40 | 1.28 | 2.42 | 23.96 | 4.40 | 1.28 |
| Eleventh..... | 2.84 | 42.48 | 3.41 | 2.15 | 3.11 | 32.68 | 9.39 | 2.26 | 2.77 | 52.29 | 8.11 | 1.67 | 2.19 | 26.14 | 3.41 | 1.75 | 2.19 | 26.14 | 3.41 | 1.75 |
| Twelfth..... | 3.73 | 33.60 | 5.52 | 3.03 | 3.81 | 50.78 | 6.18 | 2.76 | 3.32 | 39.06 | 2.87 | 2.67 | 3.17 | 24.22 | 3.53 | 2.77 | 3.17 | 24.22 | 3.53 | 2.77 |
| Thirteenth..... | 3.67 | 35.22 | 6.82 | 2.56 | 2.57 | 35.22 | 5.38 | 1.47 | 3.12 | 48.11 | 5.17 | 1.78 | 2.53 | 23.20 | 4.46 | 1.82 | 2.53 | 23.20 | 4.46 | 1.82 |
| Fourteenth..... | 3.07 | 30.35 | 7.27 | 2.21 | 3.59 | 34.83 | 5.31 | 2.22 | 3.82 | 38.82 | 4.90 | 2.38 | 3.03 | 20.90 | 3.36 | 2.33 | 3.03 | 20.90 | 3.36 | 2.33 |
| Fifteenth..... | 3.05 | 26.13 | 4.28 | 1.95 | 3.26 | 36.75 | 3.93 | 1.81 | 3.47 | 44.92 | 5.31 | 1.53 | 2.96 | 20.42 | 4.74 | 2.00 | 2.96 | 20.42 | 4.74 | 2.00 |
| Sixteenth..... | 3.58 | 28.82 | 6.12 | 1.93 | 4.09 | 42.28 | 5.63 | 2.07 | 5.04 | 62.26 | 8.45 | 1.86 | 3.20 | 30.36 | 4.77 | 1.70 | 3.20 | 30.36 | 4.77 | 1.70 |
| Seventeenth..... | 3.50 | 38.62 | 6.06 | 2.17 | 3.71 | 51.03 | 6.92 | 1.81 | 3.59 | 49.66 | 9.08 | 1.50 | 2.55 | 33.10 | 3.03 | 1.49 | 2.55 | 33.10 | 3.03 | 1.49 |
| Eighteenth..... | 1.98 | 52.21 | 9.44 | 1.20 | 1.98 | 67.16 | 12.59 | 0.33 | 2.27 | 37.02 | 9.44 | 1.05 | 1.91 | 37.31 | 10.80 | 1.25 | 1.91 | 37.31 | 10.80 | 1.25 |
| Nineteenth..... | 4.05 | 34.46 | 9.32 | 2.52 | 3.59 | 36.49 | 8.55 | 2.00 | 5.08 | 62.10 | 14.75 | 2.24 | 3.06 | 33.11 | 8.80 | 2.51 | 3.06 | 33.11 | 8.80 | 2.51 |
| Twentieth..... | 3.13 | 31.16 | 5.05 | 2.30 | 2.34 | 29.74 | 3.61 | 1.58 | 3.22 | 48.16 | 7.21 | 1.79 | 2.13 | 19.83 | 4.69 | 1.47 | 2.13 | 19.83 | 4.69 | 1.47 |
| Twenty-first..... | 4.50 | 38.01 | 4.31 | 3.67 | 4.06 | 39.32 | 6.83 | 2.92 | 3.32 | 49.80 | 4.67 | 2.03 | 3.03 | 31.45 | 2.72 | 2.40 | 3.03 | 31.45 | 2.72 | 2.40 |
| Twenty-second..... | 3.21 | 44.53 | 4.76 | 2.08 | 2.91 | 38.17 | 4.41 | 1.92 | 2.89 | 47.07 | 4.41 | 1.68 | 2.31 | 24.17 | 2.72 | 1.74 | 2.31 | 24.17 | 2.72 | 1.74 |
| Twenty-third..... | 2.69 | 34.26 | 6.69 | 2.41 | 3.27 | 40.74 | 6.68 | 1.45 | 3.00 | 39.82 | 6.69 | 1.45 | 2.32 | 25.00 | 3.85 | 1.45 | 2.32 | 25.00 | 3.85 | 1.45 |
| Twenty-fourth..... | 3.63 | 49.90 | 5.94 | 1.81 | 2.92 | 33.26 | 1.98 | 1.73 | 3.00 | 32.87 | 3.96 | 1.17 | 1.88 | 12.47 | 5.94 | 1.55 | 1.88 | 12.47 | 5.94 | 1.55 |
| Twenty-fifth..... | 2.40 | 29.29 | 2.64 | 1.70 | 2.31 | 28.28 | 3.97 | 1.50 | 2.98 | 47.48 | 3.97 | 1.78 | 2.40 | 25.25 | 3.17 | 1.76 | 2.40 | 25.25 | 3.17 | 1.76 |
| Twenty-sixth..... | 3.30 | 22.89 | 3.84 | 2.45 | 2.91 | 26.96 | 2.71 | 1.97 | 3.67 | 44.76 | 4.62 | 1.84 | 2.49 | 26.45 | 3.27 | 1.41 | 2.49 | 26.45 | 3.27 | 1.41 |
| Twenty-seventh..... | 3.59 | 19.43 | 3.96 | 1.78 | 2.95 | 33.68 | 3.63 | 1.73 | 3.59 | 46.63 | 4.62 | 1.88 | 3.03 | 25.91 | 7.26 | 1.59 | 3.03 | 25.91 | 7.26 | 1.59 |
| Twenty-eighth..... | 3.13 | 30.14 | 6.17 | 1.63 | 3.31 | 36.99 | 3.09 | 1.94 | 4.14 | 52.05 | 6.52 | 1.94 | 3.08 | 30.13 | 4.80 | 1.79 | 3.08 | 30.13 | 4.80 | 1.79 |
| Twenty-ninth..... | 3.69 | 28.15 | 5.93 | 2.45 | 3.31 | 43.79 | 3.52 | 1.73 | 5.09 | 60.20 | 8.14 | 2.57 | 3.49 | 29.71 | 4.64 | 2.32 | 3.49 | 29.71 | 4.64 | 2.32 |
| Thirtieth..... | 3.24 | 22.63 | 5.35 | 2.29 | 3.07 | 31.30 | 4.00 | 1.80 | 3.71 | 44.95 | 6.40 | 1.68 | 2.88 | 25.73 | 4.10 | 1.66 | 2.88 | 25.73 | 4.10 | 1.66 |
| Thirty-first..... | 3.23 | 41.29 | 6.25 | 1.74 | 3.14 | 40.43 | 3.85 | 2.10 | 3.45 | 52.23 | 2.41 | 2.07 | 2.71 | 26.12 | 1.92 | 2.08 | 2.71 | 26.12 | 1.92 | 2.08 |
| Thirty-second..... | 3.88 | 28.40 | 4.66 | 2.37 | 2.66 | 30.86 | 2.67 | 2.19 | 2.11 | 33.33 | 1.00 | 1.67 | 2.53 | 24.69 | 1.87 | 2.24 | 2.53 | 24.69 | 1.87 | 2.24 |
| Thirty-third..... | 3.77 | 37.56 | 6.08 | 2.00 | 3.89 | 46.28 | 3.45 | 2.14 | 5.24 | 64.39 | 7.91 | 2.34 | 3.89 | 39.57 | 8.33 | 1.74 | 3.89 | 39.57 | 8.33 | 1.74 |
| Thirty-fourth..... | 2.67 | 22.29 | 3.08 | 2.02 | 2.40 | 26.86 | 3.24 | 1.56 | 3.22 | 38.28 | 5.39 | 1.90 | 2.50 | 24.00 | 4.32 | 1.61 | 2.50 | 24.00 | 4.32 | 1.61 |

DEATHS IN WARDS.

MORTALITY BY WEEKS DURING 1896.

| | | FIRST QUARTER, 1896. | | | | | | | | | | | | | | | |
|---|--------|--------------------------|------|------|------|---------------------------|------|------|------|------|------------------------|------|------|------|--|--|--|
| CAUSES. | COLOR. | JANUARY. Weeks ended: | | | | FEBRUARY. Weeks ended: | | | | | MARCH. Weeks ended: | | | | | | |
| | | 4 | 11 | 18 | 25 | 1 | 8 | 15 | 22 | 29 | 7 | 14 | 21 | 28 | | | |
| Apoplexy | W | 9 | 9 | 9 | 7 | 12 | 7 | 9 | 8 | 9 | 10 | 10 | 8 | 7 | | | |
| | C | 20 | 16 | 20 | 22 | 23 | 24 | 25 | 35 | 30 | 24 | 30 | 33 | 42 | | | |
| Bronchitis | W | 34 | 37 | 41 | 53 | 40 | 48 | 46 | 42 | 59 | 44 | 48 | 49 | 49 | | | |
| | C | 3 | 1 | 3 | 6 | 3 | 2 | 3 | 3 | 1 | 1 | 2 | 6 | 9 | | | |
| Consumption | W | 20 | 21 | 22 | 20 | 30 | 15 | 22 | 23 | 21 | 10 | 15 | 15 | 23 | | | |
| | C | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | | | |
| Convulsions | W | ... | 1 | 3 | 1 | 2 | 2 | 7 | 7 | 8 | 4 | 4 | 6 | 2 | | | |
| | C | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | | | |
| Croup | W | 23 | 40 | 25 | 19 | 23 | 20 | 25 | 17 | 27 | 17 | 23 | 18 | 10 | | | |
| | C | ... | 1 | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | 1 | | | |
| Diphtheria | W | 1 | 1 | 3 | 2 | 1 | 1 | 3 | 1 | 3 | ... | 1 | 2 | 6 | | | |
| | C | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | | | |
| Erysipelas | W | 5 | 5 | 6 | 4 | 2 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 2 | | | |
| | C | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | | | |
| Infantile Diarrhoea (under one year) | W | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | | | |
| | C | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | | | |
| Infantile Diarrhoea (over one year) | W | 38 | 28 | 20 | 11 | 13 | 10 | 10 | 10 | 18 | 8 | 16 | 6 | 10 | | | |
| | C | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | | | |
| Inflammation of Intestines (under one year) | W | 16 | 9 | 11 | 10 | 4 | 21 | 8 | 4 | 12 | 5 | 6 | 6 | 10 | | | |
| | C | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | | | |
| Inflammation of Intestines (over one year) | W | 27 | 27 | 20 | 17 | 26 | 27 | 28 | 30 | 27 | 21 | 18 | 32 | 22 | | | |
| | C | 1 | ... | ... | 1 | 1 | ... | ... | 2 | ... | 2 | ... | 1 | 1 | | | |
| Heart Diseases (Organic) | W | 16 | 10 | 6 | 22 | 29 | 19 | 23 | 20 | 18 | 14 | 21 | 16 | 19 | | | |
| | C | ... | 1 | ... | 1 | ... | ... | ... | ... | 1 | ... | ... | ... | ... | | | |
| Kidneys, Inflammation of | W | 1 | 1 | 5 | 1 | 1 | ... | 2 | 1 | 3 | 2 | ... | ... | 2 | | | |
| | C | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | | | |
| Measles | W | 40 | 60 | 36 | 64 | 54 | 48 | 65 | 68 | 64 | 53 | 59 | 61 | 57 | | | |
| | C | 3 | 1 | 1 | 1 | 1 | 1 | 2 | 4 | 4 | 4 | 1 | 1 | 4 | | | |
| Pneumonia | W | 4 | 2 | 4 | 4 | 3 | 4 | 5 | 7 | 3 | 4 | 2 | 5 | 2 | | | |
| | C | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | | | |
| Puerperal Fever | W | 2 | 2 | 3 | 1 | 5 | 2 | 2 | 2 | 3 | 3 | 4 | 7 | 3 | | | |
| | C | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | | | |
| Rheumatism | W | 3 | ... | 1 | 3 | 1 | 1 | ... | ... | 2 | ... | 1 | 2 | 1 | | | |
| | C | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | | | |
| Scarlet Fever | W | 6 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | | | |
| | C | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | | | |
| Sunstroke | W | 5 | 4 | 3 | 9 | 10 | 7 | 6 | 7 | 10 | 2 | 7 | 6 | 3 | | | |
| | C | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | | | |
| Typhoid Fever | W | 12 | 12 | 13 | 22 | 37 | 20 | 24 | 24 | 12 | 17 | 17 | 10 | 13 | | | |
| | C | ... | 1 | 3 | ... | 1 | 1 | ... | ... | ... | ... | ... | ... | ... | | | |
| Whooping Cough | W | ... | 1 | 3 | ... | 4 | 2 | 3 | ... | ... | ... | ... | 2 | 2 | | | |
| | C | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | | | |
| Cancer | W | 14 | 14 | 13 | 10 | 17 | 10 | 12 | 13 | 11 | 10 | 11 | 12 | 15 | | | |
| | C | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | | | |
| Other Causes | W | 129 | 152 | 146 | 176 | 131 | 158 | 143 | 126 | 143 | 158 | 148 | 144 | 139 | | | |
| | C | 3 | 3 | 3 | 9 | 6 | 2 | 3 | 5 | 9 | 8 | 5 | 4 | 5 | | | |
| All Causes | W | 419 | 452 | 413 | 478 | 468 | 449 | 470 | 447 | 484 | 407 | 443 | 441 | 439 | | | |
| | C | 11 | 7 | 7 | 19 | 13 | 7 | 8 | 15 | 15 | 13 | 10 | 13 | 20 | | | |
| TOTALS | ... | 430 | 459 | 420 | 497 | 481 | 456 | 478 | 462 | 499 | 420 | 453 | 454 | 459 | | | |
| Death Rate per Annum, per 1000 of Population. | ... | 13.9 | 14.8 | 13.5 | 16.0 | 15.5 | 14.7 | 15.4 | 14.9 | 16.1 | 13.6 | 14.6 | 14.6 | 14.8 | | | |

DEATHS BY AGES AND SEXES.

| | | | | | | | | | | | | | | |
|----------------------------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Under one year | W | 146 | 133 | 104 | 108 | 97 | 105 | 91 | 120 | 114 | 92 | 114 | 108 | 109 |
| | C | 2 | 1 | ... | 4 | 1 | 3 | ... | 3 | 2 | ... | 2 | 1 | 5 |
| One to five years | W | 53 | 60 | 57 | 56 | 67 | 76 | 78 | 48 | 76 | 55 | 52 | 60 | 74 |
| | C | ... | 1 | ... | 3 | 2 | 1 | ... | 2 | 1 | ... | ... | 1 | 4 |
| Sixty years and over | W | 55 | 71 | 67 | 82 | 85 | 55 | 77 | 56 | 76 | 64 | 78 | 65 | 72 |
| | C | 1 | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... |
| Males | W | 220 | 258 | 213 | 250 | 257 | 230 | 238 | 233 | 262 | 206 | 248 | 237 | 240 |
| | C | 6 | 4 | 4 | 10 | 7 | 6 | 3 | 11 | 8 | 5 | 5 | 4 | 17 |
| Females | W | 199 | 194 | 200 | 228 | 211 | 219 | 232 | 214 | 222 | 201 | 195 | 204 | 199 |
| | C | 5 | 3 | 3 | 9 | 6 | 1 | 5 | 4 | 7 | 8 | 5 | 9 | 3 |

MORTALITY BY WEEKS DURING 1896—*Continued.*

| | | SECOND QUARTER, 1896. | | | | | | | | | | | | | | | | |
|---|--------|-----------------------|------|------|------|--------------|------|------|------|------|--------------|------|------|------|--|--|--|--|
| CAUSES. | COLOR. | APRIL. | | | | MAY. | | | | | JUNE. | | | | | | | |
| | | Weeks ended: | | | | Weeks ended: | | | | | Weeks ended: | | | | | | | |
| | | 4 | 11 | 18 | 25 | 2 | 9 | 16 | 23 | 30 | 6 | 13 | 20 | 27 | | | | |
| Apoplexy | W | 12 | 9 | 9 | 8 | 9 | 5 | 6 | 6 | 6 | 15 | 10 | 9 | 12 | | | | |
| | C | 59 | 39 | 48 | 39 | 35 | 42 | 19 | 17 | 28 | 21 | 15 | 20 | 13 | | | | |
| Bronchitis | W | 2 | | | 1 | | | | | 1 | 1 | | | | | | | |
| | C | 49 | 42 | 40 | 44 | 51 | 53 | 47 | 48 | 47 | 51 | 40 | 41 | 38 | | | | |
| Consumption | W | 3 | 3 | 4 | 4 | 4 | 3 | 9 | 4 | 2 | 4 | 1 | 1 | 2 | | | | |
| | C | 27 | 25 | 20 | 25 | 19 | 18 | 15 | 20 | 15 | 15 | 15 | 14 | 19 | | | | |
| Convulsions | W | | | | 1 | | | | | | | | | | | | | |
| | C | 4 | 2 | 3 | 1 | 2 | 2 | 3 | 1 | 3 | 2 | 3 | 1 | | | | | |
| Croup | W | | | | | | | | | | | | | | | | | |
| | C | 13 | 22 | 24 | 15 | 7 | 6 | 9 | 15 | 2 | 10 | 12 | 5 | 14 | | | | |
| Diphtheria | W | | | | | | | | | | | | | | | | | |
| | C | 1 | 2 | 3 | 3 | 2 | 1 | 3 | 2 | 3 | | 2 | 1 | 1 | | | | |
| Erysipelas | W | | | | | | | | | | | | | | | | | |
| | C | 2 | 1 | 3 | 4 | 4 | 5 | 6 | 5 | 4 | 17 | 13 | 16 | 73 | | | | |
| Infantile Diarrhoea (under one year) | W | | | | | | | | | | | | | | | | | |
| | C | | | | | 1 | 2 | 3 | 1 | 2 | 1 | 1 | 5 | 17 | | | | |
| Infantile Diarrhoea (over one year) | W | | | | | | | | | | | | | | | | | |
| | C | 12 | 19 | 15 | 18 | 14 | 14 | 8 | 12 | 9 | 21 | 20 | 36 | 52 | | | | |
| Inflammation of Intestines (under one year) | W | | | | 2 | 1 | | 3 | | 1 | 1 | 1 | | | | | | |
| | C | 7 | 11 | 10 | 12 | 12 | 19 | 16 | 2 | 15 | 4 | 13 | 22 | 18 | | | | |
| Inflammation of Intestines (over one year) | W | | | | | | | | | | | | | | | | | |
| | C | 22 | 30 | 27 | 20 | 24 | 21 | 18 | 23 | 24 | 19 | 28 | 18 | 17 | | | | |
| Heart Diseases (Organic) | W | | | | | | | | | | | | | | | | | |
| | C | 3 | 1 | 1 | | 3 | | | | 3 | | 3 | 1 | 1 | | | | |
| Kidneys, Inflammation of | W | 20 | 17 | 11 | 20 | 19 | 12 | 15 | 12 | 9 | 13 | 10 | 16 | 17 | | | | |
| | C | 1 | | | | | | | 2 | 1 | | | 1 | 2 | | | | |
| Measles | W | | 1 | 1 | | 2 | 5 | 2 | 1 | | | 2 | 4 | 1 | | | | |
| | C | | | | | | | | | | | | | | | | | |
| Pneumonia | W | 63 | 68 | 88 | 68 | 53 | 39 | 42 | 36 | 26 | 30 | 37 | 14 | 28 | | | | |
| | C | 4 | 2 | | 3 | 2 | | 1 | 3 | | | | 1 | | | | | |
| Puerperal Fever | W | 3 | 6 | 10 | 4 | 3 | 2 | 5 | 2 | 2 | 2 | 4 | 1 | 2 | | | | |
| | C | | | | | | | | | | | | | | | | | |
| Rheumatism | W | 2 | 2 | 4 | 4 | 4 | 1 | | 3 | 1 | | | 2 | 2 | | | | |
| | C | 1 | | | | | | | | | | | | | | | | |
| Scarlet Fever | W | 1 | 1 | | | | 2 | 1 | 1 | 1 | 1 | | 1 | | | | | |
| | C | | | 1 | | | | | | | | | | | | | | |
| Sunstroke | W | | | | | | | | | | | | | | | | | |
| | C | | | | | | | | | 3 | 1 | 1 | | | | | | |
| Suicide | W | 4 | 7 | 14 | 5 | 6 | 8 | 6 | 4 | 3 | 9 | 10 | 11 | 1 | | | | |
| | C | | | | | | | | | | | | | | | | | |
| Typhoid Fever | W | 13 | 8 | 4 | 9 | 6 | 6 | 6 | 10 | 7 | 12 | 8 | 8 | 13 | | | | |
| | C | | | | | | | | | | | | 1 | | | | | |
| Whooping Cough | W | 2 | 4 | 3 | 3 | 3 | | 8 | 2 | 9 | 6 | 3 | 5 | 2 | | | | |
| | C | | | | | | | | | | 1 | | | 1 | | | | |
| Cancer | W | 12 | 10 | 15 | 17 | 17 | 10 | 15 | 18 | 11 | 16 | 16 | 16 | 15 | | | | |
| | C | | | | | | | | | | | | | | | | | |
| Other Causes | W | 142 | 132 | 202 | 121 | 131 | 156 | 176 | 119 | 139 | 112 | 134 | 147 | 139 | | | | |
| | C | 3 | 2 | 7 | 6 | 4 | 4 | 1 | 2 | 11 | 3 | 2 | 1 | 6 | | | | |
| All Causes | W | 470 | 458 | 555 | 440 | 424 | 429 | 429 | 360 | 369 | 378 | 397 | 413 | 494 | | | | |
| | C | 18 | 8 | 13 | 17 | 14 | 7 | 15 | 14 | 11 | 11 | 7 | 7 | 13 | | | | |
| TOTALS | | 488 | 466 | 568 | 457 | 438 | 436 | 444 | 374 | 380 | 389 | 404 | 420 | 507 | | | | |
| Death Rate per Annum, per 1000 of Population. | | 15.7 | 15.0 | 18.3 | 14.7 | 14.7 | 14.1 | 14.3 | 12.1 | 12.2 | 12.5 | 13.0 | 13.6 | 16.3 | | | | |

DEATHS BY AGES AND SEXES—*Continued.*

| | | | | | | | | | | | | | | |
|----------------------------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Under one year | W | 127 | 123 | 183 | 124 | 111 | 118 | 131 | 89 | 85 | 112 | 120 | 116 | 196 |
| | C | 2 | 1 | 4 | 4 | 2 | | 3 | 2 | 2 | 2 | | | 4 |
| One to five years | W | 55 | 67 | 80 | 57 | 46 | 56 | 52 | 40 | 58 | 41 | 50 | 50 | 60 |
| | C | 4 | 1 | 1 | 5 | 1 | | 3 | 5 | 2 | | | | |
| Sixty years and over | W | 86 | 69 | 72 | 54 | 76 | 67 | 73 | 60 | 46 | 54 | 57 | 57 | 63 |
| | C | 3 | | 2 | 2 | 5 | | 1 | | 2 | 1 | | | |
| Males | W | 231 | 245 | 305 | 242 | 243 | 242 | 231 | 202 | 196 | 212 | 218 | 223 | 259 |
| | C | 10 | 5 | 7 | 10 | 7 | 3 | 9 | 7 | 4 | 9 | 3 | 4 | 7 |
| Females | W | 239 | 213 | 250 | 198 | 181 | 187 | 198 | 158 | 173 | 166 | 179 | 190 | 235 |
| | C | 8 | 3 | 6 | 7 | | 4 | 6 | 7 | 7 | 2 | 4 | 3 | 6 |

MORTALITY BY WEEKS DURING 1896—Continued.

| CAUSES. | COLOR. | THIRD QUARTER, 1896. | | | | | | | | | | | | | | | |
|--|--------|-----------------------|------|------|------|-------------------------|------|------|------|------|----------------------------|------|------|------|--|--|--|
| | | JULY. Weeks ended: | | | | AUGUST. Weeks ended: | | | | | SEPTEMBER. Weeks ended: | | | | | | |
| | | 4 | 11 | 18 | 25 | 1 | 8 | 15 | 22 | 29 | 5 | 12 | 19 | 26 | | | |
| Apoplexy | W | 9 | 7 | 5 | 9 | 11 | 10 | 8 | 5 | 3 | 12 | 4 | 6 | 5 | | | |
| | C | 1 | 1 | | | 15 | 12 | 10 | 8 | 6 | 11 | 9 | 9 | 14 | | | |
| Bronchitis | W | 39 | 46 | 39 | 40 | 40 | 48 | 36 | 39 | 45 | 40 | 32 | 36 | 39 | | | |
| | C | 3 | 1 | 2 | 1 | 3 | 1 | 3 | 1 | 2 | 4 | 1 | 2 | 2 | | | |
| Consumption | W | 22 | 20 | 17 | 19 | 20 | 24 | 28 | 10 | 12 | 9 | 18 | 11 | 13 | | | |
| | C | 1 | 2 | 1 | 1 | 3 | | 1 | 1 | | 3 | 3 | 1 | 5 | | | |
| Croup | W | 16 | 10 | 15 | 14 | 10 | 13 | 11 | 15 | 11 | 17 | 23 | 16 | 22 | | | |
| | C | | | | 2 | | | | 1 | | 1 | 2 | | 1 | | | |
| Erysipelas | W | 85 | 107 | 86 | 64 | 53 | 73 | 73 | 35 | 34 | 28 | 20 | 17 | 6 | | | |
| | C | 3 | | | 1 | 2 | | | 1 | 1 | | | | | | | |
| Infantile Diarrhœa (under one year) | W | 13 | 26 | 24 | 27 | 23 | 26 | 33 | 15 | 10 | 13 | 8 | 12 | 6 | | | |
| | C | | 1 | | | | | | | | | | | | | | |
| Infantile Diarrhœa (over one year) | W | 50 | 69 | 59 | 54 | 47 | 45 | 50 | 30 | 29 | 20 | 22 | 12 | 16 | | | |
| | C | 1 | 1 | | 1 | | | | 1 | 2 | | | | | | | |
| Inflammation of Intestines (under one year) .. | W | 35 | 37 | 30 | 23 | 20 | 24 | 38 | 28 | 29 | 34 | 28 | 15 | 14 | | | |
| | C | 1 | | | | | 1 | | | | 1 | | | | | | |
| Inflammation of Intestines (over one year) .. | W | 28 | 21 | 27 | 16 | 20 | 18 | 17 | 19 | 19 | 16 | 20 | 18 | 17 | | | |
| | C | 1 | | 1 | | | | | 1 | 1 | 1 | | 1 | 1 | | | |
| Heart Diseases (Organic) | W | 16 | 10 | 16 | 13 | 18 | 16 | 7 | 15 | 9 | 10 | 12 | 16 | 12 | | | |
| | C | | | 1 | | | 1 | | | | 1 | 1 | | | | | |
| Kidneys, Inflammation of | W | | 2 | 6 | 4 | 1 | 2 | 2 | 2 | | 1 | 1 | | | | | |
| | C | | | | | | | | | | | | | | | | |
| Measles | W | 17 | 31 | 17 | 15 | 20 | 16 | 16 | 13 | 7 | 16 | 15 | 14 | 24 | | | |
| | C | 1 | | 1 | | 1 | | | 1 | | | | | | | | |
| Pneumonia | W | 2 | 3 | 2 | 2 | 2 | 5 | 6 | 2 | 1 | 1 | 2 | 2 | 1 | | | |
| | C | | | | | | | | | | | | | | | | |
| Puerperal Fever | W | | 2 | 1 | 2 | 1 | | 3 | 1 | | 2 | | 1 | | | | |
| | C | | | | | | | | | | | | | | | | |
| Rheumatism | W | 1 | 1 | 1 | 1 | 1 | 1 | | | 2 | | 1 | 1 | | | | |
| | C | | | | | | | | | | | | | | | | |
| Scarlet Fever | W | | | | 1 | 7 | 24 | 148 | | | | | | | | | |
| | C | | | | | | | | | | | | | | | | |
| Sunstroke | W | 3 | 5 | 10 | 2 | 11 | 2 | 3 | 8 | 8 | 11 | 1 | 3 | 4 | | | |
| | C | | | | | | | | | | | | | | | | |
| Sulicide | W | 7 | 18 | 15 | 10 | 13 | 16 | 16 | 12 | 11 | 20 | 20 | 24 | 19 | | | |
| | C | | | 1 | | 1 | | | 2 | | 1 | | | | | | |
| Typhoid Fever | W | 5 | 6 | 3 | 19 | 7 | 8 | 5 | 1 | 5 | 6 | 7 | 8 | 3 | | | |
| | C | | | | 1 | | 1 | | 2 | 1 | | | | | | | |
| Whooping Cough | W | 15 | 20 | 18 | 21 | 17 | 20 | 16 | 10 | 22 | 7 | 10 | 10 | 12 | | | |
| | C | | | | | | | | | | | | | | | | |
| Cancer | W | 154 | 143 | 183 | 113 | 122 | 164 | 163 | 132 | 148 | 130 | 132 | 103 | 123 | | | |
| | C | 7 | 6 | 4 | 3 | 4 | 2 | 3 | 1 | 2 | 4 | 5 | 4 | 2 | | | |
| Other Causes | W | 527 | 601 | 584 | 477 | 482 | 567 | 690 | 402 | 414 | 408 | 390 | 335 | 356 | | | |
| | C | 19 | 9 | 10 | 7 | 13 | 6 | 7 | 11 | 9 | 13 | 8 | 9 | 6 | | | |
| All Causes | W | 546 | 610 | 594 | 484 | 495 | 573 | 697 | 413 | 423 | 421 | 398 | 344 | 362 | | | |
| | C | | | | | | | | | | | | | | | | |
| TOTALS | W | 17.6 | 19.7 | 19.1 | 15.6 | 15.9 | 18.4 | 22.5 | 13.3 | 13.6 | 13.6 | 12.8 | 11.1 | 11.6 | | | |
| | C | | | | | | | | | | | | | | | | |
| Death Rate per Annum, per 1000 of Population. | | | | | | | | | | | | | | | | | |

DEATHS BY AGES AND SEXES—Continued.

| | | | | | | | | | | | | | | |
|----------------------------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Under one year | W | 234 | 255 | 240 | 202 | 175 | 210 | 230 | 128 | 125 | 113 | 104 | 81 | 98 |
| | C | 4 | 1 | 2 | 1 | 4 | 2 | | 3 | 3 | 2 | 1 | | 1 |
| One to five years | W | 78 | 84 | 74 | 70 | 74 | 83 | 100 | 70 | 60 | 69 | 67 | 55 | 56 |
| | C | 1 | 1 | 1 | | 1 | 1 | | 2 | | 1 | 2 | | 1 |
| Sixty years and over | W | 53 | 51 | 72 | 52 | 63 | 62 | 92 | 38 | 48 | 50 | 51 | 53 | 47 |
| | C | 1 | | | | | 2 | 1 | | 1 | | | 2 | |
| Males | W | 188 | 338 | 332 | 257 | 272 | 298 | 410 | 220 | 210 | 228 | 213 | 161 | 191 |
| | C | 9 | 2 | 5 | 3 | 6 | 3 | 5 | 5 | 5 | 7 | 4 | 5 | 4 |
| Females | W | 239 | 263 | 252 | 220 | 210 | 269 | 280 | 182 | 204 | 180 | 177 | 174 | 165 |
| | C | 10 | 7 | 5 | 4 | 7 | 3 | 2 | 6 | 4 | 6 | 4 | 4 | 2 |

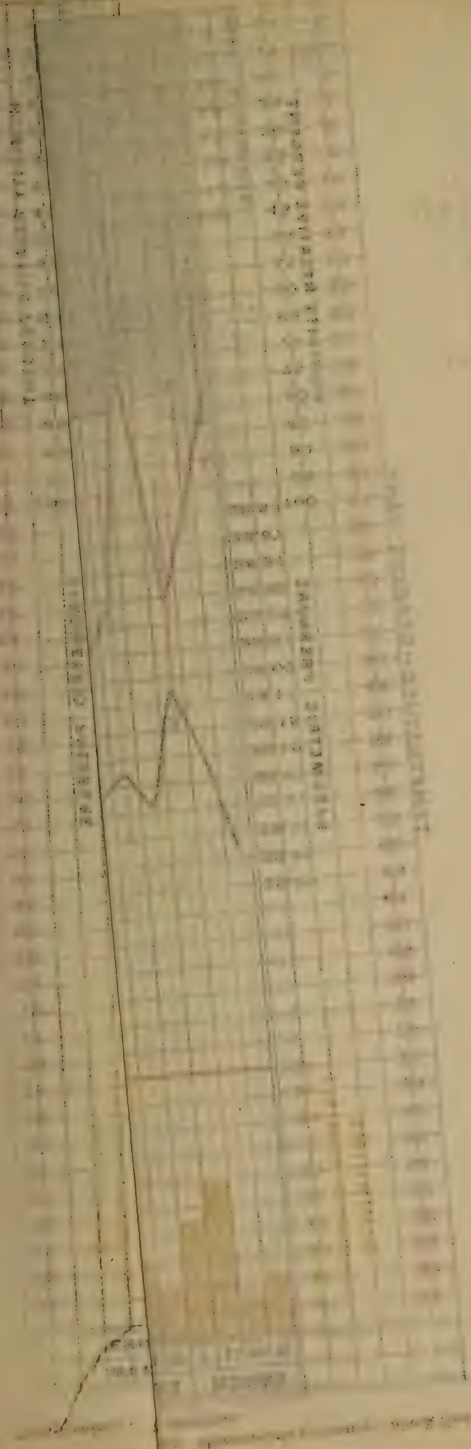
MORTALITY BY WEEKS DURING 1896—*Continued.*

| CAUSES. | COLOR. | FOURTH QUARTER, 1896. | | | | | | | | | | | | | | | |
|---|--------|--------------------------|-------|-------|-------|-------|---------------------------|-------|-------|-------|---------------------------|-------|-------|-------|--|--|--|
| | | OCTOBER. Weeks ended: | | | | | NOVEMBER. Weeks ended: | | | | DECEMBER. Weeks ended: | | | | | | |
| | | 3 | 10 | 17 | 24 | 31 | 7 | 14 | 21 | 28 | 5 | 12 | 19 | 26 | | | |
| Apoplexy | W | 12 | 5 | 12 | 11 | 9 | 5 | 10 | 12 | 8 | 15 | 11 | 10 | 10 | | | |
| | C | ..... | ..... | ..... | ..... | ..... | ..... | 1 | ..... | ..... | ..... | ..... | ..... | ..... |  |  |  |
| Bronchitis | W | 24 | 20 | 13 | 16 | 15 | 14 | 19 | 19 | 22 | 18 | 20 | 25 | 31 | | | |
| | C | 1 | ..... | ..... | ..... | ..... | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  |  |  |
| Consumption | W | 34 | 31 | 33 | 32 | 32 | 32 | 50 | 42 | 33 | 32 | 34 | 38 | 36 | | | |
| | C | 2 | ..... | 1 | 1 | 3 | 1 | 1 | 4 | 1 | 3 | 2 | 4 | 2 | | | |
| Convulsions..... | W | 15 | 17 | 16 | 7 | 22 | 15 | 15 | 17 | 19 | 10 | 19 | 20 | 13 | | | |
| | C | ..... | ..... | 1 | ..... | ..... | ..... | ..... | 1 | ..... | ..... | ..... | ..... | ..... |  |  |  |
| Croup | W | 4 | 4 | 4 | 4 | 3 | ..... | 3 | 4 | 1 | 2 | 8 | 4 | 2 | | | |
| | C | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  |  |  |
| Diphtheria | W | 22 | 18 | 28 | 29 | 33 | 16 | 23 | 22 | 21 | 19 | 22 | 18 | 24 | | | |
| | C | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  |  |  |
| Erysipelas | W | 3 | ..... | 1 | 1 | 1 | ..... | ..... | 2 | ..... | 2 | 3 | 1 | 3 | | | |
| | C | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  |  |  |
| Infantile Diarrhoea (under one year) | W | 12 | 7 | 6 | 2 | 4 | 6 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | | | |
| | C | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  |  |  |
| Infantile Diarrhoea (over one year) | W | 4 | 1 | 1 | ..... | ..... | ..... | ..... | 2 | 1 | ..... | ..... | ..... | ..... |  |  |  |
| | C | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  |  |  |
| Inflammation of Intes- tines (under one year) .. | W | 8 | 13 | 14 | 9 | 14 | 8 | 7 | 9 | 8 | 7 | 5 | 7 | 8 | | | |
| | C | ..... | ..... | 2 | ..... | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  |  |  |
| Inflammation of Intes- tines (over one year) .. | W | 11 | 12 | 17 | 7 | 11 | 12 | 8 | 0 | 8 | 12 | 10 | 10 | 8 | | | |
| | C | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  |  |  |
| Heart Diseases (Organic) | W | 21 | 22 | 29 | 27 | 28 | 24 | 10 | 24 | 27 | 25 | 27 | 25 | 24 | | | |
| | C | 1 | ..... | 3 | 1 | ..... | 1 | ..... | 1 | ..... | 1 | 2 | 1 | 1 | | | |
| Kidneys, Inflammation of | W | 16 | 19 | 14 | 16 | 18 | 14 | 15 | 18 | 15 | 14 | 16 | 28 | 9 | | | |
| | C | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  |  |  |
| Measles | W | ..... | 2 | 1 | ..... | 3 | ..... | 2 | ..... | ..... | 1 | 1 | 1 | 2 | | | |
| | C | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  |  |  |
| Pneumonia | W | 24 | 29 | 18 | 36 | 32 | 35 | 37 | 38 | 41 | 51 | 41 | 58 | 65 | | | |
| | C | ..... | ..... | 1 | ..... | 1 | ..... | 1 | 1 | ..... | 2 | 3 | 2 | ..... |  |  |  |
| Puerperal Fever | W | 2 | ..... | 1 | ..... | 4 | ..... | 1 | 1 | 5 | 3 | 1 | 2 | 1 | | | |
| | C | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  |  |  |
| Rheumatism | W | 4 | 1 | 5 | 1 | 1 | 1 | 1 | ..... | 1 | 3 | 1 | 1 | 2 | | | |
| | C | ..... | ..... | ..... | ..... | ..... | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  |  |  |
| Scarlet Fever..... | W | 3 | 2 | 1 | 1 | ..... | 2 | 1 | 1 | ..... | 6 | ..... | ..... | 2 | | | |
| | C | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  |  |  |
| Sunstroke..... | W | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  |  |  |
| | C | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  |  |  |
| Suicide..... | W | 5 | 8 | 6 | 8 | 10 | 4 | 5 | 8 | 11 | 4 | 8 | 5 | 5 | | | |
| | C | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  |  |  |
| Typhoid Fever..... | W | 20 | 18 | 17 | 19 | 22 | 20 | 11 | 11 | 11 | 14 | 8 | 8 | 11 | | | |
| | C | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  |  |  |
| Whooping Cough | W | 0 | 1 | 3 | 3 | 6 | 1 | 2 | 3 | 3 | 3 | 1 | 6 | 2 | | | |
| | C | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  |  |  |
| Cancer | W | 11 | 13 | 20 | 11 | 17 | 12 | 12 | 10 | 9 | 22 | 18 | 14 | 11 | | | |
| | C | ..... | ..... | ..... | ..... | ..... | 1 | 1 | ..... | ..... | ..... | ..... | ..... | ..... |  |  |  |
| Other Causes | W | 128 | 117 | 141 | 107 | 138 | 116 | 142 | 120 | 125 | 131 | 112 | 131 | 114 | | | |
| | C | 2 | 3 | 1 | 2 | 5 | ..... | 4 | ..... | 1 | 2 | 2 | 4 | 3 | | | |
| All Causes | W | 389 | 360 | 401 | 347 | 422 | 337 | 375 | 374 | 360 | 395 | 367 | 413 | 386 | | | |
| | C | 8 | 4 | 10 | 6 | 11 | 5 | 8 | 7 | 2 | 8 | 10 | 14 | 11 | | | |
| TOTALS ..... | ..... | 397 | 364 | 411 | 353 | 433 | 342 | 383 | 381 | 362 | 403 | 377 | 427 | 397 | | | |
| Death Rate per Annum per 1000 of Population. | ..... | 12.8 | 11.7 | 13.2 | 11.4 | 13.9 | 11.0 | 12.3 | 12.3 | 11.6 | 13.0 | 12.1 | 13.8 | 12.8 | | | |

DEATHS BY AGES AND SEXES—*Continued.*

| | | | | | | | | | | | | | | |
|----------------------------|---|-------|-------|-----|-------|-----|-------|-------|-------|-------|-------|-------|-------|-------|
| Under one year | W | 84 | 86 | 100 | 55 | 101 | 83 | 74 | 77 | 77 | 94 | 84 | 95 | 112 |
| | C | 4 | ..... | 3 | 1 | 2 | ..... | 1 | 1 | ..... | ..... | ..... | ..... | 1 |
| One to five years..... | W | 59 | 48 | 48 | 48 | 44 | 44 | 62 | 42 | 48 | 55 | 44 | 64 | 65 |
| | C | ..... | ..... | 1 | ..... | 1 | ..... | 1 | ..... | ..... | ..... | ..... | ..... | 3 |
| Sixty years and over | W | 59 | 52 | 76 | 65 | 69 | 53 | 55 | 73 | 62 | 78 | 60 | 77 | 62 |
| | C | ..... | ..... | 1 | ..... | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Males | W | 211 | 190 | 193 | 182 | 235 | 188 | 218 | 208 | 182 | 202 | 200 | 216 | 215 |
| | C | 5 | 3 | 5 | ..... | 6 | 1 | 4 | 6 | 2 | 5 | 5 | 7 | 5 |
| Females | W | 178 | 170 | 208 | 165 | 187 | 149 | 157 | 166 | 178 | 193 | 167 | 197 | 171 |
| | C | 3 | 1 | 5 | 6 | 5 | 4 | 4 | 1 | ..... | 3 | 5 | 7 | 6 |

ALL DATA SUBJECTS



1. The first part of the graph shows a series of peaks and valleys, with the highest peak reaching approximately 10 on the vertical scale.

2. The second part of the graph shows a series of peaks and valleys, with the highest peak reaching approximately 10 on the vertical scale.

3. The third part of the graph shows a series of peaks and valleys, with the highest peak reaching approximately 10 on the vertical scale.

4. The fourth part of the graph shows a series of peaks and valleys, with the highest peak reaching approximately 10 on the vertical scale.

5. The fifth part of the graph shows a series of peaks and valleys, with the highest peak reaching approximately 10 on the vertical scale.

6. The sixth part of the graph shows a series of peaks and valleys, with the highest peak reaching approximately 10 on the vertical scale.

7. The seventh part of the graph shows a series of peaks and valleys, with the highest peak reaching approximately 10 on the vertical scale.

8. The eighth part of the graph shows a series of peaks and valleys, with the highest peak reaching approximately 10 on the vertical scale.

9. The ninth part of the graph shows a series of peaks and valleys, with the highest peak reaching approximately 10 on the vertical scale.

10. The tenth part of the graph shows a series of peaks and valleys, with the highest peak reaching approximately 10 on the vertical scale.

11. The eleventh part of the graph shows a series of peaks and valleys, with the highest peak reaching approximately 10 on the vertical scale.

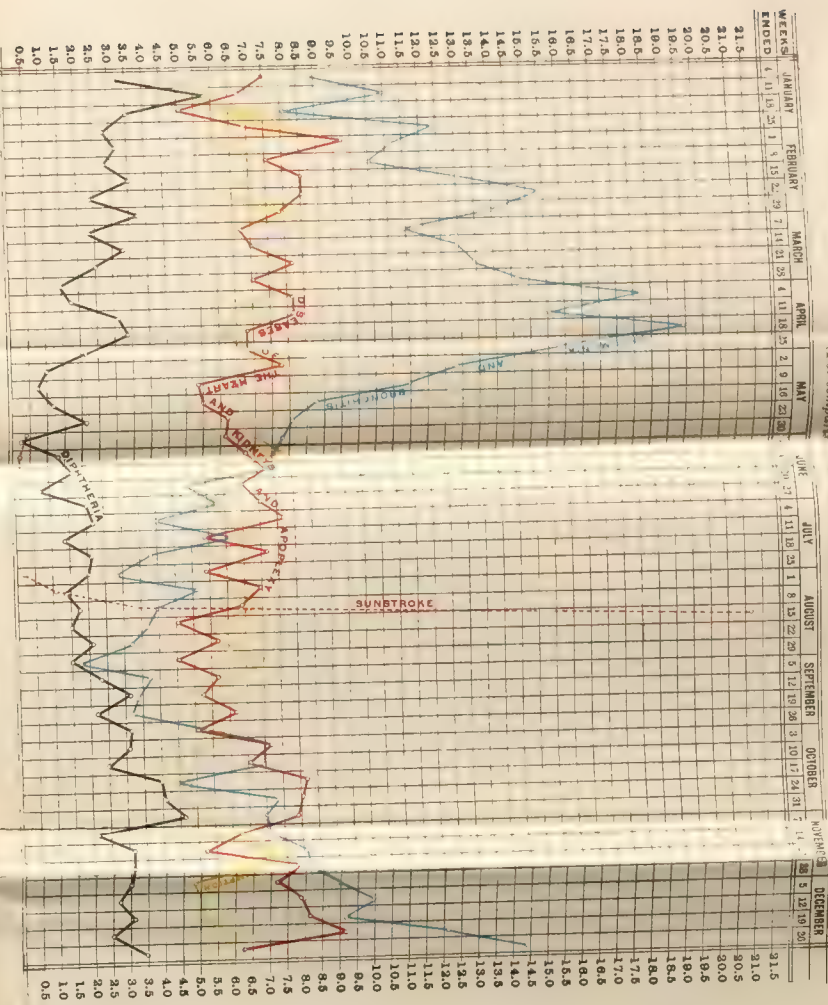
12. The twelfth part of the graph shows a series of peaks and valleys, with the highest peak reaching approximately 10 on the vertical scale.

13. The thirteenth part of the graph shows a series of peaks and valleys, with the highest peak reaching approximately 10 on the vertical scale.

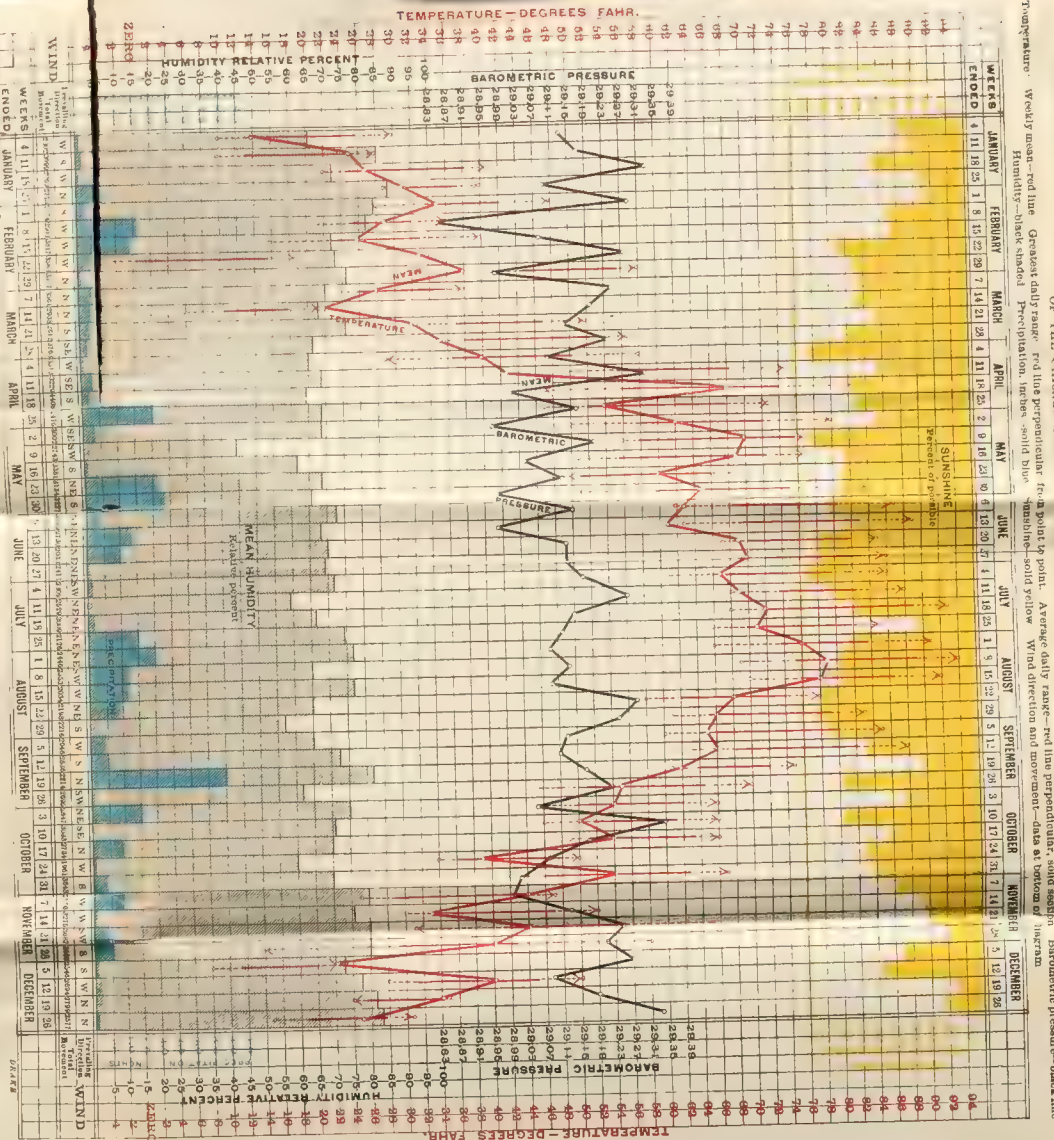
14. The fourteenth part of the graph shows a series of peaks and valleys, with the highest peak reaching approximately 10 on the vertical scale.

15. The fifteenth part of the graph shows a series of peaks and valleys, with the highest peak reaching approximately 10 on the vertical scale.

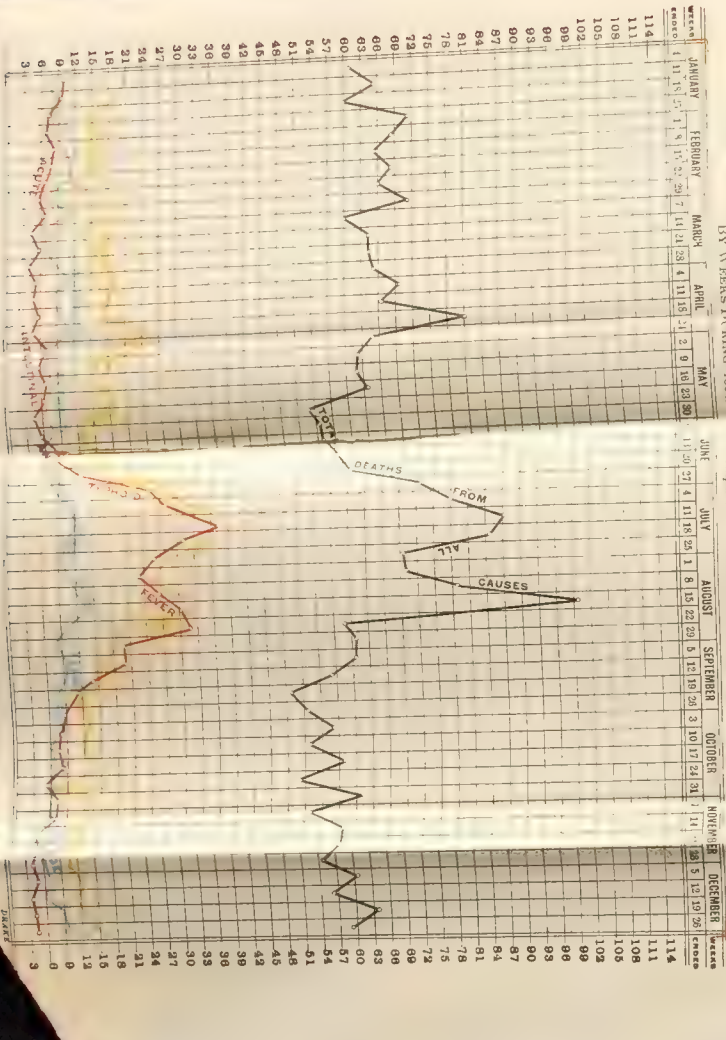
16. The sixteenth part of the graph shows a series of peaks and valleys, with the highest peak reaching approximately 10 on the vertical scale.



METEOROLOGIC DIAGRAM SHOWING VARIATIONS OF THE MONTHLY MEANS BY WEEKS FOR 1896: BASED ON THE OBSERVATIONS ON THE CHICAGO STATION OF THE UNITED STATES WEATHER BUREAU.



DIGESTION SHOWING AVERAGE DAILY MORTALITY FROM ALL CAUSES OF CHILDREN UNDER ONE YEAR OF AGE—OF CHILDREN WHO WERE ONE AND FIVE YEARS—AND FOR THE ACUTE INTESTINAL DISEASES AND TYPHOID FEVER:
BIRMINGHAM, ENGLAND, DURING 1896. (*For comparison with the Macgregor Diagram*)



PART III.

STATISTICAL

CITY OF CHICAGO

FOR THE

YEARS 1895-96

TABLES FOR 1895.

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I. DEATHS AND REPORTED CAUSES OF DEATHS: 1895.

| CAUSES OF DEATH. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|---|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| Total Deaths from All Causes | 2088 | 2352 | 2127 | 1934 | 1885 | 1773 | 2439 | 2039 | 2015 | 2020 | 1726 | 1771 | 24219 |
| Disease | 1991 | 2264 | 2026 | 1851 | 1746 | 1641 | 2277 | 1907 | 1896 | 1897 | 1619 | 1654 | 22769 |
| Violence | 97 | 88 | 101 | 133 | 139 | 132 | 162 | 132 | 119 | 123 | 107 | 117 | 1450 |
| GENERAL DISEASES: | | | | | | | | | | | | | |
| <i>Febrile or Zymotic—</i> | | | | | | | | | | | | | |
| Cerebro-spinal fever | | 6 | | | 1 | | | | | 1 | | | 8 |
| Diphtheria | 180 | 102 | 76 | 63 | 46 | 71 | 69 | 97 | 102 | 240 | 201 | 173 | 1420 |
| Influenza | 8 | 61 | 65 | 17 | 8 | 2 | 4 | | | | | | 165 |
| Malarial fevers | 5 | 3 | 4 | 3 | 7 | 2 | 5 | 6 | 3 | 7 | 4 | 7 | 56 |
| Measles | 21 | 19 | 18 | 24 | 21 | 24 | 14 | 3 | 2 | 2 | 4 | 4 | 156 |
| Mumps | | | 1 | | | | | | | 1 | 2 | | 4 |
| Scarlet fever | 15 | 11 | 2 | 9 | 7 | 5 | 4 | 8 | 7 | 1 | 3 | 5 | 77 |
| Smallpox | 56 | 23 | 33 | 14 | 15 | 2 | 3 | 7 | 2 | | | 2 | 157 |
| Typhoid fever | 30 | 21 | 26 | 30 | 30 | 18 | 36 | 59 | 76 | 90 | 60 | 42 | 518 |
| Whooping cough | 19 | 13 | 8 | 6 | 9 | 5 | 14 | 12 | 13 | 11 | 6 | 6 | 122 |
| Total | 334 | 259 | 233 | 166 | 144 | 129 | 149 | 192 | 205 | 353 | 280 | 239 | 2688 |
| <i>Diarrheal—</i> | | | | | | | | | | | | | |
| Cholera infantum | | | | | | 174 | 524 | 300 | 259 | | | | 1257 |
| morbus | | | 6 | | 3 | 13 | 30 | 15 | 16 | 2 | 2 | 1 | 88 |
| Diarrhea | 7 | 5 | | 4 | 3 | 6 | 18 | 29 | 20 | 13 | 4 | 1 | 110 |
| infantile | 3 | 2 | 6 | 8 | 28 | | | | | 51 | 11 | 10 | 119 |
| Dysentery | 1 | | 2 | 3 | 2 | 4 | 19 | 10 | 13 | 7 | 2 | 1 | 64 |
| Total | 11 | 7 | 14 | 15 | 36 | 197 | 591 | 354 | 308 | 73 | 19 | 13 | 1638 |
| <i>Zoogenous—</i> | | | | | | | | | | | | | |
| Hydrophobia | | | | 2 | 2 | | 1 | 2 | | 1 | | | 8 |
| Total | | | | 2 | 2 | | 1 | 2 | | 1 | | | 8 |
| <i>Venereal—</i> | | | | | | | | | | | | | |
| Syphilis, acquired | | | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | | | 7 |
| congenital | 3 | 4 | 1 | | 1 | | 1 | 4 | 1 | 5 | 4 | 2 | 26 |
| Total | 3 | 4 | 2 | | 2 | 1 | 2 | 5 | 2 | 6 | 4 | 2 | 33 |
| <i>Septic—</i> | | | | | | | | | | | | | |
| Erysipelas | 14 | 4 | 7 | 15 | 11 | 4 | 3 | 5 | 4 | 5 | 10 | 9 | 91 |
| Puerperal septicemia | 13 | 19 | 12 | 11 | | 12 | 4 | 10 | 10 | 16 | 11 | 22 | 140 |
| Pyæmia | 9 | 6 | 3 | 4 | 8 | 4 | 6 | 6 | 1 | 3 | 6 | 6 | 62 |
| Septicemia | 6 | 14 | 9 | 9 | 8 | 12 | 5 | 17 | 8 | 6 | 7 | 6 | 107 |
| Total | 42 | 43 | 31 | 39 | 27 | 32 | 18 | 38 | 23 | 30 | 34 | 43 | 400 |
| <i>Parasitic Diseases—</i> | | | | | | | | | | | | | |
| Thrush | | | | 1 | | | 1 | 2 | 3 | 1 | 1 | 2 | 11 |
| Total | | | | 1 | | | 1 | 2 | 3 | 1 | 1 | 2 | 11 |
| <i>Dietetic Diseases—</i> | | | | | | | | | | | | | |
| Alcoholism | 11 | 7 | 4 | 4 | 11 | 4 | 9 | 9 | 6 | 13 | 8 | 11 | 97 |
| Ptomaine opium poisoning | | | | | | | | | | | | | |
| Scurvy | | | | | | | 1 | | 1 | | | | 2 |
| Total | 11 | 7 | 4 | 4 | 11 | 4 | 10 | 9 | 7 | 13 | 8 | 11 | 99 |

DEATHS AND REPORTED CAUSES OF DEATHS: 1895—Continued.

| CAUSES OF DEATH. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|--|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| <i>Constitutional Diseases—</i> | | | | | | | | | | | | | |
| Anemia | 4 | 4 | 6 | 5 | 7 | 3 | 4 | 5 | 5 | 5 | 8 | 3 | 59 |
| Cancer of breast | 1 | 3 | 5 | 7 | 5 | 3 | 3 | 6 | 6 | 3 | 1 | 4 | 44 |
| liver | 7 | 3 | 5 | 2 | 2 | 6 | 5 | 11 | 1 | 6 | 3 | 8 | 59 |
| rectum | 3 | 2 | 2 | 1 | 2 | 6 | 4 | 1 | 2 | 5 | 4 | 3 | 30 |
| stomach | 10 | 14 | 10 | 11 | 21 | 13 | 11 | 13 | 13 | 16 | 10 | 19 | 161 |
| womb | 13 | 8 | 12 | 9 | 11 | 13 | 9 | 8 | 9 | 5 | 6 | 10 | 113 |
| other parts | 16 | 26 | 16 | 23 | 20 | 25 | 33 | 15 | 32 | 26 | 23 | 20 | 275 |
| Diabetes | 5 | 9 | 7 | 9 | 9 | 3 | 6 | 2 | 8 | 4 | 10 | 12 | 84 |
| Hemorrhagic diathesis | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 2 | 2 | 2 | 2 | 2 | 24 |
| Leucocythemia | 1 | 3 | 2 | 1 | 1 | 2 | 4 | 2 | 2 | 3 | 1 | 20 | 20 |
| Purpura | | | | | | | | | | | | | |
| Rheumatism | 10 | 13 | 11 | 9 | 15 | 11 | 8 | 5 | 10 | 6 | 4 | 10 | 112 |
| Rickets | 1 | 1 | 1 | 1 | 5 | 3 | 3 | 2 | 1 | 3 | 2 | 2 | 22 |
| Tuberculosis, articular | 3 | 3 | 2 | 2 | 1 | 3 | 3 | 3 | 5 | 3 | 3 | 2 | 21 |
| cerebral | 10 | 9 | 17 | 11 | 17 | 9 | 13 | 9 | 11 | 12 | 4 | 7 | 129 |
| hemoptysic | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 5 |
| glandular | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 4 |
| mesenteric | 2 | 2 | 2 | 2 | 2 | 4 | 1 | 1 | 3 | 3 | 1 | 18 | 18 |
| pulmonary | 171 | 192 | 217 | 205 | 197 | 156 | 187 | 167 | 161 | 179 | 165 | 172 | 2169 |
| other forms | 7 | 4 | 6 | 15 | 20 | 7 | 7 | 9 | 9 | 7 | 14 | 12 | 117 |
| Total | 259 | 298 | 322 | 317 | 338 | 258 | 298 | 269 | 275 | 282 | 259 | 291 | 3466 |
| <i>Developmental—</i> | | | | | | | | | | | | | |
| Atelectasis | 1 | 2 | 3 | 1 | 1 | 1 | 3 | 4 | 7 | 1 | 4 | 28 | 28 |
| Cyanosis | 6 | 2 | 1 | 4 | 2 | 1 | 2 | 2 | 2 | 3 | 2 | 27 | 27 |
| Marasmus, infantile | 65 | 63 | 57 | 65 | 52 | 72 | 94 | 71 | 80 | 87 | 52 | 39 | 797 |
| senile | 8 | 6 | 11 | 6 | 5 | 2 | 8 | 7 | 10 | 5 | 11 | 9 | 88 |
| Old age | 32 | 64 | 49 | 39 | 33 | 32 | 30 | 26 | 28 | 28 | 30 | 32 | 423 |
| Premature births | 15 | 17 | 13 | 20 | 18 | 14 | 18 | 14 | 13 | 19 | 17 | 12 | 190 |
| Spina bifida | 3 | 3 | 4 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 2 | 16 | 16 |
| Trismus nascentium | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 8 | 8 |
| Other congenital defects and accidents | 4 | 5 | 12 | 6 | 8 | 6 | 16 | 7 | 14 | 12 | 13 | 16 | 119 |
| Total | 132 | 163 | 150 | 143 | 123 | 128 | 173 | 128 | 152 | 159 | 129 | 116 | 1696 |
| LOCAL DISEASES: | | | | | | | | | | | | | |
| <i>Nervous Diseases—</i> | | | | | | | | | | | | | |
| Apoplexy | 41 | 46 | 41 | 44 | 30 | 36 | 34 | 38 | 25 | 38 | 46 | 28 | 447 |
| Brain, abscess of | 3 | 3 | 2 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 15 |
| compression of | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| concussion of | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 8 |
| congestion of | 9 | 9 | 7 | 10 | 15 | 6 | 9 | 8 | 6 | 8 | 5 | 3 | 95 |
| softening of | 3 | 1 | 5 | 2 | 2 | 1 | 3 | 5 | 2 | 2 | 3 | 26 | 26 |
| tumor of | 1 | 2 | 2 | 3 | 3 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 17 |
| other diseases of | 2 | 2 | 6 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 15 |
| Brain and membranes, inflammation of | 48 | 54 | 71 | 58 | 66 | 44 | 64 | 58 | 54 | 42 | 30 | 46 | 635 |
| Chorea | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 |
| Convulsions | 112 | 144 | 98 | 79 | 93 | 100 | 84 | 81 | 86 | 77 | 77 | 82 | 1113 |
| Dementia | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| Epilepsy | 2 | 5 | 1 | 1 | 4 | 2 | 2 | 3 | 6 | 2 | 3 | 31 | 31 |
| Hydrocephalus | 7 | 5 | 4 | 4 | 4 | 2 | 6 | 6 | 5 | 2 | 3 | 48 | 48 |
| Laryngismus stridulus | 3 | 1 | 3 | 1 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 14 |
| Locomotor ataxia | 4 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 16 |
| Mania | 2 | 2 | 1 | 4 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 13 |
| Melancholia | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 4 |
| Paralysis | 14 | 23 | 24 | 23 | 15 | 17 | 7 | 20 | 17 | 28 | 17 | 14 | 219 |
| Spinal cord and membranes, diseases of | 23 | 15 | 28 | 25 | 16 | 20 | 40 | 25 | 24 | 25 | 18 | 24 | 283 |
| Sunstroke | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 22 |
| Tetanus | 4 | 1 | 2 | 3 | 3 | 3 | 7 | 2 | 7 | 8 | 1 | 38 | 38 |
| Nervous system, other diseases of | 4 | 5 | 3 | 7 | 3 | 2 | 2 | 1 | 5 | 3 | 3 | 35 | 35 |
| Total | 282 | 314 | 295 | 266 | 270 | 249 | 265 | 244 | 248 | 251 | 204 | 213 | 3101 |

DEATHS AND REPORTED CAUSES OF DEATHS: 1895—*Continued.*

| CAUSES OF DEATH. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|--|----------|-----------|--------|--------|-------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| <i>Circulatory System—</i> | | | | | | | | | | | | | |
| Angina pectoris..... | 3 | 2 | 5 | 7 | 2 | 1 | 6 | 3 | 8 | 3 | 6 | 12 | 58 |
| Aneurism of aorta..... | 4 | 2 | 2 | ..... | ..... | 1 | 3 | 9 | 1 | 1 | 6 | 1 | 30 |
| of other arteries..... | 2 | 2 | ..... | 1 | ..... | 1 | 2 | ..... | ..... | ..... | 1 | ..... | 9 |
| Arteries, other diseases of..... | ..... | 1 | 8 | 1 | 4 | 1 | 1 | 3 | ..... | 1 | 3 | 4 | 27 |
| Endocarditis..... | 15 | 15 | 2 | 13 | 12 | 14 | 13 | 5 | 5 | 19 | 15 | 13 | 141 |
| Heart, fatty..... | 9 | 2 | 3 | 6 | 7 | 6 | 6 | 8 | 7 | 14 | 8 | 9 | 85 |
| valve-disease of..... | 30 | 38 | 37 | 38 | 43 | 25 | 34 | 34 | 27 | 39 | 45 | 44 | 434 |
| other diseases of..... | 56 | 50 | 62 | 65 | 57 | 47 | 38 | 43 | 48 | 50 | 47 | 45 | 608 |
| Occlusion of artery..... | 1 | 5 | 2 | 3 | 1 | ..... | 2 | 3 | 4 | 2 | 3 | 4 | 30 |
| Pericarditis..... | 4 | 2 | 1 | 4 | 6 | ..... | ..... | 1 | 2 | 5 | 6 | 7 | 38 |
| Circulatory system, other diseases of..... | ..... | 1 | 4 | 3 | ..... | 1 | ..... | ..... | 1 | ..... | ..... | 1 | 11 |
| Total..... | 124 | 120 | 126 | 141 | 132 | 97 | 105 | 109 | 103 | 134 | 140 | 140 | 1471 |
| <i>Respiratory System—</i> | | | | | | | | | | | | | |
| Asthma..... | 4 | 7 | 7 | 9 | 5 | 3 | 3 | 3 | 4 | 11 | 10 | 14 | 80 |
| Bronchitis..... | 170 | 226 | 156 | 97 | 89 | 53 | 49 | 41 | 38 | 56 | 78 | 88 | 1133 |
| Catarrhal croup..... | 31 | 24 | 33 | 21 | 9 | 9 | 18 | 17 | 32 | 14 | 11 | 3 | 212 |
| Empyema..... | 5 | 2 | 4 | 3 | ..... | 2 | 3 | ..... | ..... | 3 | 1 | ..... | 23 |
| Laryngitis..... | 9 | 14 | 5 | ..... | ..... | 3 | 2 | 1 | 2 | 1 | 7 | 12 | 56 |
| Oedema of glottis..... | 1 | ..... | 2 | ..... | ..... | ..... | 1 | 1 | 1 | ..... | 2 | ..... | 8 |
| Pleurisy..... | 6 | 1 | 9 | 7 | 7 | 3 | 1 | 3 | 1 | 2 | 1 | 8 | 49 |
| Pneumonia..... | 277 | 444 | 337 | 319 | 210 | 107 | 73 | 79 | 68 | 140 | 158 | 147 | 2359 |
| Pulmonary congestion..... | 10 | 17 | 6 | 8 | 5 | 1 | ..... | ..... | ..... | 1 | 1 | 2 | 51 |
| Respiratory sys., other dis. of..... | 10 | 18 | 10 | 22 | 5 | 11 | 17 | 11 | 12 | 13 | 12 | 15 | 156 |
| Total..... | 523 | 753 | 559 | 486 | 330 | 192 | 167 | 156 | 158 | 241 | 281 | 281 | 4127 |
| <i>Digestive System—</i> | | | | | | | | | | | | | |
| Appendicitis..... | 7 | 3 | 9 | 11 | 10 | 10 | 22 | 12 | 13 | 5 | 11 | 15 | 128 |
| Gallstones..... | 2 | ..... | 2 | ..... | ..... | 2 | 2 | ..... | 1 | 2 | 2 | 1 | 14 |
| Gastric ulcer..... | ..... | ..... | 2 | ..... | ..... | 3 | 4 | 2 | 5 | 1 | 3 | 1 | 23 |
| Gastritis..... | 15 | 21 | 13 | 24 | 22 | 5 | 20 | 13 | 26 | 24 | 17 | 18 | 218 |
| Gastro-enteritis..... | 31 | 28 | 24 | 21 | 27 | 58 | 131 | 90 | 86 | 59 | 27 | 28 | 610 |
| Hernia..... | 2 | 1 | 2 | 3 | 2 | 1 | 4 | 5 | 3 | 3 | 3 | 5 | 34 |
| Intestines, inflammation of..... | 29 | 39 | 36 | 17 | 45 | 79 | 155 | 112 | 92 | 52 | 33 | 29 | 718 |
| obstruction of..... | 7 | 9 | 13 | 12 | 8 | 12 | 12 | 5 | 10 | 13 | 8 | 13 | 122 |
| other diseases of..... | 1 | 3 | 6 | 2 | ..... | 1 | 5 | 3 | 1 | 5 | 1 | ..... | 28 |
| Liver, abscess of..... | 1 | ..... | ..... | ..... | ..... | 2 | ..... | ..... | 4 | ..... | 5 | 2 | 14 |
| cirrhosis of..... | 13 | 12 | 10 | 11 | 16 | 10 | 16 | 10 | 9 | 11 | 18 | 23 | 159 |
| inflammation of..... | 3 | 3 | 3 | 3 | 8 | 5 | ..... | 7 | 1 | 7 | 5 | 7 | 52 |
| other diseases of..... | 8 | 11 | 7 | 8 | 9 | 10 | 3 | 7 | 10 | 5 | 8 | 11 | 97 |
| Peritonitis..... | 33 | 43 | 48 | 35 | 37 | 28 | 25 | 15 | 20 | 17 | 16 | 11 | 328 |
| Other diseases of digestive system..... | 11 | 9 | 13 | 10 | 19 | 10 | 5 | 7 | 18 | 17 | 6 | 10 | 135 |
| Total..... | 163 | 182 | 188 | 157 | 207 | 238 | 399 | 290 | 297 | 223 | 161 | 175 | 2680 |
| <i>Absorbent and Glandular System—</i> | | | | | | | | | | | | | |
| Addison's disease..... | 1 | 1 | ..... | ..... | 1 | 1 | 1 | ..... | 1 | ..... | ..... | ..... | 6 |
| Bronchocele..... | 1 | ..... | 1 | 1 | ..... | 1 | 1 | 1 | ..... | 2 | 1 | ..... | 9 |
| Lymphatics, diseases of..... | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1 | ..... | 2 |
| Total..... | 3 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 2 | 2 | ..... | 17 |
| <i>Urinary System—</i> | | | | | | | | | | | | | |
| Calculus, renal..... | 1 | 1 | ..... | ..... | 1 | 1 | ..... | ..... | 1 | 1 | ..... | ..... | 6 |
| vesical..... | ..... | ..... | ..... | ..... | 1 | ..... | ..... | ..... | 1 | ..... | ..... | ..... | 2 |
| Cystitis..... | ..... | 1 | 1 | 2 | 1 | ..... | 2 | 4 | 2 | 4 | 1 | 5 | 23 |
| Nephritis, acute..... | 16 | 13 | 14 | 13 | 14 | 20 | 17 | 11 | 19 | 18 | 14 | 21 | 190 |
| chronic..... | 37 | 57 | 44 | 42 | 47 | 37 | 36 | 45 | 35 | 48 | 40 | 43 | 511 |
| Uremia..... | 11 | 5 | 10 | 14 | 13 | 11 | 6 | 7 | 7 | 13 | 9 | 8 | 114 |
| Other diseases, urinary organs..... | 1 | ..... | 6 | 8 | 4 | 5 | 3 | 2 | 6 | 2 | 4 | 2 | 43 |
| Total..... | 66 | 77 | 75 | 79 | 81 | 74 | 64 | 69 | 71 | 86 | 68 | 79 | 889 |

DEATHS AND REPORTED CAUSES OF DEATHS: 1895—*Concluded.*

| CAUSES OF DEATH. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|---|----------|-----------|--------|--------|-------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| <i>Reproductive System—</i> | | | | | | | | | | | | | |
| Abortion, miscarriage | 3 | ..... | 2 | 2 | ..... | 3 | 4 | 4 | 1 | ..... | 1 | 4 | 24 |
| Childbirth | 5 | ..... | ..... | 6 | 3 | 1 | 4 | 1 | ..... | 1 | 2 | 2 | 33 |
| Diseases of uterus | 1 | ..... | ..... | ..... | 1 | 1 | 1 | ..... | 2 | 1 | 1 | 1 | 9 |
| ovaries and other appendages ..... | ..... | 6 | 2 | 4 | 7 | 7 | 1 | 3 | 4 | 5 | 4 | 3 | 46 |
| Pelvic abscess | 2 | 1 | 1 | ..... | 1 | 1 | ..... | ..... | 6 | 4 | 2 | 2 | 20 |
| peritonitis | 2 | ..... | ..... | 1 | ..... | 1 | ..... | ..... | 2 | 1 | 1 | 2 | 10 |
| Placenta praeria ..... | ..... | 1 | 3 | 2 | 1 | 3 | 2 | 1 | ..... | 3 | 1 | 2 | 19 |
| Puerperal convulsions | 1 | 1 | 3 | 2 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 4 | 20 |
| hemorrhage | 5 | ..... | 1 | ..... | 1 | 1 | 1 | 2 | 2 | ..... | ..... | 1 | 14 |
| peritonitis ..... | ..... | 4 | 1 | 3 | 1 | 1 | 2 | ..... | 3 | 3 | 2 | 2 | 22 |
| Pregnancy and parturition, other afflictions of | 1 | ..... | 4 | 1 | 15 | 2 | ..... | ..... | 3 | 1 | ..... | 2 | 29 |
| Total | 20 | 20 | 17 | 21 | 31 | 22 | 17 | 13 | 24 | 20 | 15 | 26 | 246 |
| <i>Osseous and Integumentary Systems—</i> | | | | | | | | | | | | | |
| Abscess | 6 | 6 | 2 | 2 | 5 | 6 | 4 | 7 | 2 | 6 | 2 | 7 | 55 |
| Carbuncle | 1 | ..... | 1 | ..... | ..... | ..... | ..... | 1 | 1 | 2 | ..... | ..... | 6 |
| Caries and necrosis ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1 | 1 |
| Eczema ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Senile gangrene ..... | ..... | 3 | 1 | 1 | ..... | 1 | ..... | 6 | 1 | 2 | 1 | 2 | 18 |
| Ulcer | 1 | ..... | 1 | ..... | ..... | ..... | ..... | ..... | ..... | 1 | ..... | ..... | 3 |
| Osseous and integumentary, other diseases of | 10 | 7 | 4 | 10 | 6 | 11 | 11 | 12 | 15 | 11 | 11 | 13 | 121 |
| Total | 18 | 16 | 9 | 13 | 11 | 18 | 15 | 26 | 19 | 22 | 14 | 23 | 204 |
| DEATHS FROM VIOLENCE. | | | | | | | | | | | | | |
| <i>Misadventure or Negligence—</i> | | | | | | | | | | | | | |
| Asphyxiated | 4 | 4 | 5 | 4 | 5 | 1 | 8 | 1 | 1 | 6 | 2 | 5 | 46 |
| Burns and scalds | 6 | 9 | 12 | 8 | 10 | 13 | 10 | 7 | 9 | 11 | 14 | 14 | 123 |
| Drowning | 4 | 2 | 2 | 12 | 10 | 13 | 30 | 25 | 17 | 5 | 8 | 1 | 129 |
| Explosions | 1 | 1 | 3 | ..... | ..... | ..... | 2 | ..... | ..... | 1 | 2 | 2 | 12 |
| Exposure | 2 | 4 | ..... | ..... | 1 | 2 | 2 | ..... | ..... | 1 | 1 | 1 | 14 |
| Falls | 19 | 8 | 7 | 11 | 21 | 14 | 14 | 23 | 13 | 18 | 15 | 11 | 174 |
| Firearms | 2 | 3 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 4 | 24 |
| Killed by electricity or machinery | 1 | 4 | 1 | 1 | 2 | 5 | 1 | 2 | ..... | ..... | 1 | 1 | 19 |
| elevators | 3 | ..... | 1 | 2 | 4 | ..... | ..... | ..... | ..... | 1 | 1 | 1 | 13 |
| railroads | 16 | 16 | 14 | 18 | 21 | 21 | 26 | 13 | 15 | 16 | 22 | 24 | 222 |
| street cars | 3 | 1 | 5 | 5 | 5 | 5 | 9 | 2 | 5 | 4 | 5 | 3 | 52 |
| Poisons ..... | ..... | 5 | 5 | 6 | 6 | 8 | 4 | 8 | 3 | 8 | 3 | 1 | 57 |
| Run over by other than railroads or street cars | 1 | ..... | 1 | 3 | 1 | 3 | 5 | 3 | 4 | 5 | 1 | 3 | 30 |
| Misadventure or negligence, other forms | 7 | 1 | 4 | 10 | 12 | 10 | 9 | 9 | 11 | 13 | 4 | 13 | 103 |
| Total | 69 | 58 | 61 | 82 | 100 | 97 | 122 | 95 | 80 | 90 | 80 | 84 | 1018 |
| <i>Homicide—</i> | | | | | | | | | | | | | |
| Manslaughter | 4 | 7 | 1 | 6 | 10 | 11 | 11 | 4 | 8 | 7 | 5 | 7 | 81 |
| Total | 4 | 7 | 1 | 6 | 10 | 11 | 11 | 4 | 8 | 7 | 5 | 7 | 81 |
| <i>Suicide—</i> | | | | | | | | | | | | | |
| By cutting instrument ..... | ..... | 1 | 1 | ..... | 1 | 1 | 3 | ..... | ..... | 2 | ..... | ..... | 9 |
| drowning ..... | ..... | 1 | 1 | ..... | 2 | 1 | 2 | 4 | ..... | 3 | ..... | ..... | 15 |
| firearms | 6 | 8 | 18 | 16 | 7 | 6 | 8 | 2 | 13 | 9 | 7 | 8 | 108 |
| hanging | 3 | 4 | 5 | 5 | 5 | 4 | 4 | 5 | 7 | 2 | 2 | 3 | 49 |
| poison | 13 | 9 | 13 | 19 | 11 | 11 | 9 | 16 | 11 | 8 | 10 | 12 | 142 |
| other modes | 2 | ..... | 1 | 4 | 3 | 1 | 3 | 6 | ..... | 1 | 3 | 3 | 27 |
| Total | 24 | 23 | 39 | 45 | 29 | 24 | 29 | 33 | 31 | 25 | 22 | 26 | 350 |
| Legal execution ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1 | ..... | ..... | 1 |
| Total ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1 | ..... | ..... | 1 |

II. AGES OF DECEDENTS AND DEATH RATES PER 1000 LIVING AT GIVEN AGES : 1895.

| AGE. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. | Death Rate per 1000. |
|-----------------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|----------------------|
| Under 5 years | 954 | 1008 | 797 | 681 | 706 | 798 | 1412 | 1030 | 1015 | 820 | 616 | 615 | 10452 | 46.03 |
| Under 1 year | 603 | 664 | 520 | 433 | 445 | 573 | 1073 | 692 | 633 | 472 | 347 | 362 | 6817 | 129.11 |
| From 1 to 2 years | 146 | 170 | 118 | 112 | 134 | 112 | 216 | 214 | 241 | 159 | 91 | 105 | 1818 | 37.88 |
| 2 to 3 | 94 | 77 | 73 | 65 | 48 | 59 | 49 | 50 | 66 | 87 | 69 | 71 | 808 | 18.03 |
| 3 to 4 | 61 | 49 | 51 | 40 | 49 | 36 | 51 | 39 | 44 | 56 | 60 | 46 | 582 | 13.47 |
| 4 to 5 | 50 | 48 | 35 | 31 | 30 | 18 | 23 | 35 | 31 | 46 | 49 | 31 | 427 | 11.12 |
| 5 to 10 | 97 | 82 | 67 | 63 | 56 | 68 | 61 | 70 | 89 | 134 | 100 | 77 | 964 | 4.69 |
| 10 to 20 | 80 | 81 | 91 | 80 | 97 | 70 | 82 | 79 | 75 | 95 | 66 | 79 | 975 | 2.76 |
| 20 to 30 | 200 | 212 | 198 | 200 | 227 | 170 | 166 | 170 | 178 | 192 | 166 | 188 | 2267 | 7.92 |
| 30 to 40 | 212 | 221 | 278 | 230 | 198 | 180 | 181 | 172 | 177 | 214 | 201 | 217 | 2481 | 12.40 |
| 40 to 50 | 159 | 191 | 168 | 199 | 167 | 145 | 175 | 138 | 141 | 156 | 179 | 161 | 1979 | 13.74 |
| 50 to 60 | 132 | 166 | 162 | 200 | 148 | 116 | 118 | 140 | 121 | 146 | 126 | 145 | 1720 | 17.92 |
| 60 to 70 | 124 | 165 | 159 | 173 | 156 | 111 | 125 | 123 | 113 | 136 | 144 | 151 | 1680 | 27.63 |
| 70 to 80 | 86 | 146 | 146 | 101 | 91 | 79 | 84 | 84 | 73 | 90 | 92 | 90 | 1162 | 55.86 |
| 80 to 90 | 41 | 61 | 56 | 51 | 31 | 29 | 29 | 31 | 29 | 31 | 28 | 46 | 463 | 67.37 |
| 90 to 100 | 3 | 18 | 5 | 6 | 6 | 7 | 6 | 2 | 4 | 5 | 8 | 2 | 72 | |
| 100 years and upwards | 1 | ..... | ..... | ..... | 2 | ..... | ..... | ..... | ..... | 1 | ..... | ..... | 4 | |
| Total | 2088 | 2352 | 2127 | 1984 | 1885 | 1773 | 2439 | 2039 | 2015 | 2020 | 1726 | 1771 | 24219 | 15.14 |

III. NATIVITY, SEX, SOCIAL RELATION AND COLOR, OF DECEDENTS.

| NATIVITY. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|--------------------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| PLACE OF BIRTH. | | | | | | | | | | | | | |
| Chicago | 1004 | 1044 | 850 | 749 | 754 | 785 | 1306 | 971 | 1062 | 900 | 670 | 646 | 10741 |
| Elsewhere, United States | 482 | 515 | 489 | 463 | 454 | 441 | 530 | 472 | 398 | 451 | 416 | 471 | 5582 |
| Germany | 223 | 274 | 315 | 292 | 247 | 193 | 225 | 229 | 211 | 232 | 221 | 244 | 2906 |
| Ireland | 122 | 213 | 148 | 175 | 136 | 125 | 142 | 120 | 119 | 151 | 153 | 145 | 1749 |
| Scandinavia | 93 | 97 | 104 | 92 | 94 | 61 | 75 | 77 | 65 | 74 | 81 | 80 | 993 |
| Slavonia | 69 | 87 | 84 | 60 | 95 | 71 | 65 | 65 | 57 | 68 | 66 | 70 | 857 |
| Other foreign countries | 95 | 122 | 137 | 153 | 105 | 97 | 96 | 105 | 103 | 144 | 119 | 115 | 1391 |
| Total | 2088 | 2352 | 2127 | 1984 | 1885 | 1773 | 2439 | 2039 | 2015 | 2020 | 1726 | 1771 | 24219 |
| SEX. | | | | | | | | | | | | | |
| Males | 1135 | 1269 | 1170 | 1091 | 982 | 973 | 1323 | 1105 | 1082 | 1106 | 942 | 962 | 13140 |
| Females | 953 | 1083 | 957 | 893 | 903 | 800 | 1116 | 934 | 933 | 914 | 784 | 809 | 11079 |
| Total | 2088 | 2352 | 2127 | 1984 | 1885 | 1773 | 2439 | 2039 | 2015 | 2020 | 1726 | 1771 | 24219 |
| SOCIAL RELATION. | | | | | | | | | | | | | |
| Single | 1354 | 1399 | 1202 | 1083 | 1119 | 1109 | 1758 | 1384 | 1359 | 1263 | 999 | 1013 | 15042 |
| Married | 555 | 658 | 654 | 655 | 581 | 486 | 483 | 495 | 502 | 556 | 537 | 558 | 6710 |
| Widowed | 179 | 295 | 271 | 246 | 185 | 178 | 198 | 160 | 154 | 201 | 200 | 200 | 2467 |
| Total | 2088 | 2352 | 2127 | 1984 | 1885 | 1773 | 2439 | 2039 | 2015 | 2020 | 1726 | 1771 | 24219 |
| COLOR. | | | | | | | | | | | | | |
| White | 2044 | 2299 | 2059 | 1930 | 1838 | 1724 | 2396 | 1993 | 1977 | 1979 | 1694 | 1735 | 23668 |
| Colored | 44 | 53 | 68 | 54 | 47 | 49 | 43 | 46 | 38 | 41 | 32 | 36 | 551 |
| Total | 2088 | 2352 | 2127 | 1984 | 1885 | 1773 | 2439 | 2039 | 2015 | 2020 | 1726 | 1771 | 24219 |

IV. SUMMARY OF DEATHS FROM CLASSIFIED CAUSES OF DEATH
BY MONTHS: 1895.

| CAUSES OF DEATH. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|---------------------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| GENERAL DISEASES: | | | | | | | | | | | | | |
| Febrile or Zymotic..... | 334 | 259 | 233 | 166 | 144 | 129 | 149 | 192 | 205 | 353 | 280 | 239 | 2683 |
| Diarrheal..... | 11 | 7 | 14 | 15 | 36 | 197 | 591 | 354 | 308 | 73 | 19 | 13 | 1638 |
| Septic..... | 42 | 43 | 31 | 39 | 27 | 32 | 18 | 38 | 23 | 30 | 34 | 43 | 400 |
| Cancerous..... | 50 | 54 | 50 | 53 | 61 | 57 | 67 | 57 | 62 | 58 | 48 | 65 | 682 |
| Tuberculous..... | 189 | 212 | 242 | 236 | 237 | 176 | 210 | 190 | 187 | 204 | 184 | 196 | 2463 |
| Developmental, infantile..... | 92 | 93 | 90 | 98 | 85 | 94 | 135 | 95 | 114 | 126 | 88 | 75 | 1185 |
| senile..... | 40 | 70 | 60 | 45 | 38 | 34 | 38 | 33 | 38 | 33 | 41 | 41 | 511 |
| Other general diseases..... | 34 | 43 | 36 | 35 | 55 | 30 | 35 | 40 | 38 | 41 | 40 | 45 | 472 |
| Total..... | 792 | 781 | 756 | 687 | 683 | 749 | 1243 | 999 | 975 | 918 | 734 | 717 | 10034 |
| LOCAL DISEASES: | | | | | | | | | | | | | |
| Nervous system..... | 282 | 314 | 295 | 266 | 270 | 249 | 265 | 244 | 248 | 251 | 204 | 213 | 3101 |
| Circulatory system..... | 124 | 120 | 126 | 141 | 132 | 97 | 105 | 109 | 103 | 134 | 140 | 140 | 1471 |
| Respiratory system..... | 523 | 753 | 559 | 486 | 330 | 192 | 167 | 156 | 158 | 241 | 281 | 281 | 4127 |
| Digestive system..... | 163 | 182 | 188 | 157 | 207 | 238 | 399 | 290 | 297 | 223 | 161 | 175 | 2680 |
| Urinary system..... | 66 | 77 | 75 | 79 | 81 | 74 | 64 | 69 | 71 | 86 | 68 | 79 | 889 |
| Reproductive system..... | 20 | 20 | 17 | 21 | 31 | 22 | 17 | 13 | 24 | 20 | 15 | 26 | 246 |
| Other local diseases..... | 21 | 17 | 10 | 14 | 12 | 20 | 17 | 27 | 20 | 24 | 16 | 23 | 221 |
| Total..... | 1199 | 1483 | 1270 | 1164 | 1063 | 892 | 1034 | 908 | 921 | 979 | 885 | 937 | 12735 |
| VIOLENCE: | | | | | | | | | | | | | |
| Misadventure or negligence | 69 | 58 | 61 | 82 | 100 | 97 | 122 | 95 | 80 | 90 | 80 | 84 | 1018 |
| Homicide..... | 4 | 7 | 1 | 6 | 10 | 11 | 11 | 4 | 8 | 7 | 5 | 7 | 81 |
| Suicide..... | 24 | 23 | 39 | 45 | 29 | 24 | 29 | 33 | 31 | 25 | 22 | 26 | 350 |
| Execution..... | | | | | | | | | | 1 | | | 1 |
| Total..... | 97 | 88 | 101 | 133 | 139 | 132 | 162 | 132 | 119 | 123 | 107 | 117 | 1450 |
| Total all causes..... | 2088 | 2352 | 2127 | 1984 | 1885 | 1773 | 2439 | 2039 | 2015 | 2020 | 1726 | 1771 | 24219 |

V. TOTAL NUMBER OF DEATHS FROM THE TWENTY PRINCIPAL CAUSES OF DEATH, BY MONTHS: 1895.

| CAUSES OF DEATH. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|---------------------------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| Diarrheal diseases..... | 11 | 7 | 14 | 15 | 36 | 197 | 591 | 354 | 308 | 73 | 19 | 13 | 1638 |
| Tubercular diseases [<i>a</i> | 189 | 212 | 242 | 236 | 237 | 176 | 210 | 190 | 187 | 204 | 184 | 196 | 2463 |
| Pneumonia..... | 277 | 444 | 337 | 319 | 210 | 107 | 73 | 79 | 68 | 140 | 158 | 147 | 2359 |
| Diphtheria [<i>b</i> | 180 | 102 | 76 | 63 | 46 | 71 | 69 | 97 | 102 | 240 | 201 | 173 | 1420 |
| Brain diseases..... | 107 | 117 | 126 | 128 | 120 | 90 | 108 | 111 | 92 | 94 | 85 | 82 | 1260 |
| Convulsions..... | 112 | 144 | 98 | 79 | 93 | 100 | 84 | 81 | 86 | 77 | 77 | 82 | 1113 |
| Bronchitis..... | 170 | 226 | 156 | 97 | 89 | 53 | 49 | 41 | 38 | 56 | 78 | 80 | 1133 |
| Heart diseases..... | 114 | 107 | 105 | 126 | 125 | 92 | 91 | 91 | 89 | 127 | 121 | 118 | 1306 |
| Smallpox..... | 56 | 23 | 33 | 14 | 15 | 2 | 3 | 7 | 2 | ..... | ..... | 2 | 157 |
| Infantile marasmus..... | 65 | 63 | 57 | 65 | 52 | 72 | 94 | 71 | 80 | 87 | 52 | 39 | 797 |
| Cancer..... | 50 | 54 | 50 | 53 | 61 | 57 | 67 | 57 | 62 | 58 | 48 | 65 | 682 |
| Typhoid fever..... | 30 | 21 | 26 | 30 | 30 | 18 | 36 | 59 | 76 | 90 | 60 | 42 | 518 |
| Nephritis, chronic..... | 37 | 57 | 44 | 42 | 47 | 37 | 36 | 45 | 35 | 48 | 40 | 43 | 511 |
| acute..... | 16 | 13 | 14 | 13 | 14 | 20 | 17 | 11 | 19 | 18 | 14 | 21 | 190 |
| Puerperal diseases..... | 28 | 32 | 26 | 27 | 22 | 24 | 19 | 20 | 20 | 25 | 18 | 40 | 301 |
| Cerebro-spinal fever [<i>x</i>..... | ..... | 6 | ..... | ..... | 1 | ..... | ..... | ..... | ..... | 1 | ..... | ..... | 8 |
| Septic diseases [<i>c</i> | 29 | 24 | 19 | 28 | 27 | 20 | 14 | 28 | 13 | 14 | 23 | 21 | 260 |
| Whooping cough..... | 19 | 13 | 8 | 6 | 9 | 5 | 14 | 12 | 13 | 11 | 6 | 6 | 122 |
| Scarlet fever..... | 15 | 11 | 2 | 9 | 7 | 5 | 4 | 8 | 7 | 1 | 3 | 5 | 77 |
| Measles..... | 21 | 19 | 18 | 24 | 21 | 24 | 14 | 3 | 2 | 2 | 4 | 4 | 156 |
| Total..... | 1526 | 1695 | 1451 | 1374 | 1262 | 1170 | 1593 | 1365 | 1299 | 1366 | 1191 | 1179 | 16471 |

a] Including Consumption.

c] Not including Puerperal Sept.

x] Non-Contagious.

VI. MORTALITY FROM ALL CAUSES BY WARDS AND MONTHS: 1895.

| TOTAL DEATHS IN | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|---------------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| Ward First | 28 | 25 | 24 | 25 | 34 | 41 | 58 | 35 | 27 | 49 | 40 | 49 | 435 |
| Second | 38 | 58 | 28 | 32 | 24 | 28 | 26 | 24 | 19 | 25 | 18 | 20 | 340 |
| Third | 25 | 39 | 45 | 39 | 31 | 36 | 37 | 37 | 29 | 33 | 21 | 28 | 410 |
| Fourth | 42 | 45 | 35 | 27 | 37 | 33 | 35 | 20 | 28 | 31 | 23 | 34 | 390 |
| Fifth | 68 | 70 | 68 | 49 | 53 | 58 | 62 | 54 | 53 | 43 | 39 | 42 | 659 |
| Sixth | 77 | 97 | 87 | 82 | 65 | 93 | 122 | 98 | 103 | 85 | 85 | 80 | 1074 |
| Seventh | 45 | 53 | 43 | 41 | 32 | 45 | 66 | 75 | 51 | 45 | 44 | 47 | 587 |
| Eighth | 54 | 57 | 65 | 48 | 48 | 50 | 64 | 53 | 44 | 45 | 49 | 42 | 619 |
| Ninth | 75 | 81 | 62 | 69 | 51 | 60 | 85 | 79 | 61 | 59 | 44 | 53 | 779 |
| Tenth | 103 | 126 | 82 | 79 | 84 | 88 | 111 | 95 | 99 | 100 | 80 | 73 | 1120 |
| Eleventh | 38 | 36 | 46 | 45 | 43 | 34 | 39 | 29 | 30 | 45 | 37 | 34 | 456 |
| Twelfth | 50 | 85 | 71 | 81 | 63 | 97 | 91 | 62 | 77 | 66 | 69 | 70 | 882 |
| Thirteenth | 68 | 54 | 60 | 63 | 55 | 45 | 72 | 48 | 54 | 65 | 50 | 43 | 677 |
| Fourteenth | 85 | 84 | 74 | 77 | 63 | 63 | 94 | 65 | 78 | 76 | 63 | 66 | 888 |
| Fifteenth | 79 | 81 | 91 | 78 | 62 | 44 | 115 | 80 | 97 | 88 | 53 | 74 | 942 |
| Sixteenth | 107 | 84 | 78 | 77 | 104 | 58 | 136 | 117 | 131 | 112 | 86 | 78 | 1168 |
| Seventeenth | 25 | 36 | 39 | 44 | 27 | 31 | 47 | 33 | 35 | 34 | 28 | 22 | 401 |
| Eighteenth | 26 | 31 | 29 | 24 | 24 | 19 | 31 | 30 | 21 | 32 | 18 | 14 | 299 |
| Nineteenth | 65 | 91 | 75 | 68 | 43 | 64 | 94 | 71 | 78 | 73 | 60 | 49 | 831 |
| Twentieth | 18 | 21 | 39 | 28 | 27 | 26 | 44 | 41 | 45 | 32 | 28 | 34 | 383 |
| Twenty-first | 33 | 34 | 40 | 35 | 40 | 46 | 46 | 47 | 29 | 32 | 39 | 40 | 464 |
| Twenty-second | 43 | 54 | 37 | 34 | 33 | 22 | 39 | 37 | 33 | 31 | 37 | 31 | 431 |
| Twenty-third | 41 | 68 | 39 | 47 | 41 | 43 | 64 | 31 | 49 | 41 | 40 | 46 | 550 |
| Twenty-fourth | 19 | 33 | 26 | 25 | 29 | 10 | 27 | 21 | 20 | 22 | 23 | 21 | 276 |
| Twenty-fifth | 43 | 37 | 25 | 36 | 37 | 27 | 43 | 20 | 34 | 32 | 33 | 37 | 404 |
| Twenty-sixth | 65 | 72 | 69 | 52 | 55 | 46 | 68 | 57 | 65 | 66 | 45 | 46 | 706 |
| Twenty-seventh | 20 | 29 | 30 | 17 | 18 | 17 | 21 | 23 | 34 | 21 | 13 | 25 | 268 |
| Twenty-eighth | 33 | 35 | 30 | 22 | 18 | 23 | 28 | 28 | 17 | 24 | 16 | 26 | 300 |
| Twenty-ninth | 52 | 73 | 39 | 45 | 43 | 42 | 49 | 48 | 54 | 55 | 35 | 47 | 582 |
| Thirtieth | 101 | 109 | 107 | 99 | 71 | 93 | 146 | 139 | 86 | 93 | 84 | 91 | 1219 |
| Thirty-first | 45 | 55 | 51 | 57 | 50 | 47 | 57 | 37 | 35 | 52 | 45 | 37 | 568 |
| Thirty-second | 54 | 50 | 36 | 38 | 62 | 36 | 35 | 42 | 50 | 49 | 50 | 38 | 540 |
| Thirty-third | 42 | 61 | 54 | 28 | 39 | 38 | 95 | 88 | 67 | 57 | 60 | 57 | 686 |
| Thirty-fourth | 91 | 82 | 61 | 48 | 62 | 65 | 79 | 67 | 63 | 90 | 55 | 58 | 821 |
| Public Institutions | 287 | 306 | 342 | 325 | 317 | 205 | 213 | 208 | 219 | 217 | 216 | 209 | 3064 |
| Total | 2088 | 2352 | 2127 | 1984 | 1885 | 1773 | 2439 | 2039 | 2015 | 2020 | 1726 | 1771 | 24219 |

VII. MORTALITY OF CHILDREN, BY WARDS AND MONTHS: 1895.

| DEATHS UNDER FIVE YEARS. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|------------------------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| Ward First..... | 9 | 9 | 9 | 6 | 6 | 14 | 12 | 5 | 6 | 9 | 1 | 5 | 91 |
| Second..... | 13 | 12 | 12 | 9 | 5 | 13 | 11 | 6 | 6 | 10 | 2 | 8 | 107 |
| Third..... | 7 | 13 | 13 | 6 | 8 | 11 | 13 | 11 | 6 | 9 | 1 | 9 | 107 |
| Fourth..... | 13 | 15 | 10 | 6 | 10 | 9 | 17 | 4 | 10 | 8 | 5 | 10 | 117 |
| Fifth..... | 36 | 34 | 20 | 19 | 20 | 30 | 37 | 22 | 26 | 16 | 16 | 11 | 287 |
| Sixth..... | 47 | 60 | 42 | 40 | 27 | 60 | 90 | 49 | 61 | 37 | 38 | 36 | 587 |
| Seventh..... | 26 | 31 | 19 | 19 | 15 | 25 | 48 | 57 | 34 | 21 | 19 | 23 | 337 |
| Eighth..... | 42 | 32 | 27 | 20 | 21 | 29 | 49 | 28 | 30 | 21 | 27 | 15 | 341 |
| Ninth..... | 35 | 35 | 29 | 29 | 26 | 35 | 59 | 53 | 44 | 34 | 16 | 20 | 415 |
| Tenth..... | 60 | 41 | 42 | 34 | 45 | 52 | 75 | 72 | 66 | 61 | 32 | 43 | 623 |
| Eleventh..... | 11 | 6 | 16 | 7 | 22 | 9 | 26 | 10 | 13 | 17 | 16 | 5 | 158 |
| Twelfth..... | 15 | 23 | 20 | 19 | 14 | 29 | 43 | 23 | 21 | 19 | 17 | 15 | 258 |
| Thirteenth..... | 17 | 24 | 24 | 12 | 20 | 22 | 45 | 27 | 36 | 23 | 13 | 10 | 273 |
| Fourteenth..... | 47 | 40 | 33 | 33 | 29 | 21 | 57 | 33 | 41 | 31 | 30 | 24 | 419 |
| Fifteenth..... | 47 | 34 | 46 | 40 | 25 | 27 | 80 | 43 | 54 | 34 | 27 | 36 | 493 |
| Sixteenth..... | 77 | 46 | 33 | 46 | 55 | 39 | 109 | 84 | 92 | 69 | 63 | 43 | 756 |
| Seventeenth..... | 13 | 9 | 19 | 22 | 12 | 20 | 35 | 19 | 26 | 18 | 13 | 11 | 217 |
| Eighteenth..... | 6 | 5 | 10 | 7 | 8 | 10 | 18 | 13 | 10 | 17 | 6 | 6 | 116 |
| Nineteenth..... | 40 | 43 | 31 | 26 | 22 | 43 | 61 | 39 | 43 | 37 | 28 | 15 | 423 |
| Twentieth..... | 9 | 10 | 13 | 7 | 9 | 6 | 24 | 23 | 15 | 11 | 7 | 11 | 145 |
| Twenty-first..... | 11 | 17 | 17 | 7 | 15 | 17 | 25 | 14 | 10 | 11 | 10 | 7 | 161 |
| Twenty-second..... | 21 | 23 | 13 | 13 | 10 | 11 | 24 | 19 | 14 | 16 | 14 | 14 | 192 |
| Twenty-third..... | 22 | 37 | 20 | 23 | 28 | 22 | 40 | 14 | 30 | 17 | 18 | 20 | 291 |
| Twenty-fourth..... | 9 | 15 | 5 | 2 | 10 | 3 | 9 | 6 | 10 | 5 | 4 | 5 | 83 |
| Twenty-fifth..... | 21 | 16 | 9 | 11 | 8 | 6 | 18 | 7 | 6 | 8 | 4 | 8 | 122 |
| Twenty-sixth..... | 41 | 46 | 39 | 26 | 27 | 28 | 36 | 35 | 36 | 32 | 23 | 14 | 383 |
| Twenty-seventh..... | 8 | 13 | 13 | 4 | 11 | 6 | 14 | 18 | 17 | 8 | ..... | 8 | 120 |
| Twenty-eighth..... | 7 | 24 | 13 | 8 | 8 | 14 | 16 | 18 | 9 | 12 | 9 | 8 | 146 |
| Twenty-ninth..... | 23 | 40 | 14 | 20 | 23 | 23 | 27 | 31 | 34 | 19 | 10 | 20 | 248 |
| Thirtieth..... | 56 | 59 | 48 | 39 | 41 | 50 | 101 | 88 | 53 | 50 | 30 | 41 | 656 |
| Thirty-first..... | 21 | 33 | 19 | 19 | 18 | 22 | 32 | 25 | 21 | 28 | 15 | 16 | 269 |
| Thirty-second..... | 15 | 13 | 7 | 9 | 17 | 5 | 9 | 14 | 16 | 12 | 11 | 5 | 133 |
| Thirty-third..... | 17 | 36 | 28 | 15 | 21 | 23 | 69 | 53 | 49 | 26 | 30 | 33 | 400 |
| Thirty-fourth..... | 52 | 56 | 24 | 17 | 26 | 24 | 43 | 40 | 32 | 40 | 30 | 28 | 412 |
| Public Institutions..... | 60 | 58 | 60 | 61 | 44 | 40 | 40 | 27 | 38 | 34 | 31 | 32 | 525 |
| Total..... | 954 | 1008 | 797 | 681 | 706 | 798 | 1412 | 1030 | 1015 | 820 | 616 | 615 | 10452 |
| Premature births { Still-births | 253 | 214 | 221 | 202 | 172 | 213 | 222 | 215 | 189 | 167 | 209 | 203 | 2480 |

VIII. DEATHS FROM DIPHTHERIA, BY WARDS AND MONTHS: 1895.

| DIPHTHERIA DEATHS IN | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|---------------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| Ward First | | 1 | | 1 | | | | | 1 | | | | 3 |
| Second | | 4 | | | | | | | | | | 1 | 5 |
| Third | 1 | 1 | 1 | 1 | | | | | | | | | 4 |
| Fourth | 4 | 3 | 3 | 1 | 2 | 2 | 1 | | | | 1 | 3 | 20 |
| Fifth | 4 | 2 | 7 | 1 | 1 | 1 | | 3 | 4 | 5 | 3 | 3 | 34 |
| Sixth | 5 | 2 | 3 | 6 | 3 | 1 | 5 | 4 | 6 | 10 | 15 | 8 | 68 |
| Seventh | 3 | 2 | 1 | 1 | | 3 | 3 | 11 | 7 | 8 | 7 | 8 | 54 |
| Eighth | 3 | 3 | 1 | 3 | 1 | 6 | 1 | 3 | 3 | 4 | 8 | 4 | 40 |
| Ninth | 6 | 6 | 5 | 3 | 1 | 1 | 3 | 3 | 4 | 7 | 3 | 2 | 44 |
| Tenth | 23 | 6 | 5 | 1 | 22 | 6 | 3 | 7 | 6 | 12 | 6 | 9 | 87 |
| Eleventh | 3 | 1 | 1 | 1 | 2 | 2 | 2 | 6 | | 6 | 8 | 2 | 34 |
| Twelfth | 2 | 1 | 3 | 2 | 4 | 1 | 4 | 2 | 3 | 7 | 2 | 3 | 34 |
| Thirteenth | 5 | 2 | 1 | | | 6 | 2 | 1 | 2 | 10 | 7 | 4 | 40 |
| Fourteenth | 14 | 4 | 5 | 7 | 6 | 5 | 4 | 1 | 1 | 17 | 9 | 10 | 83 |
| Fifteenth | 12 | 6 | 3 | 3 | 4 | 1 | 3 | 5 | 7 | 14 | 14 | 15 | 87 |
| Sixteenth | 8 | 3 | 2 | 2 | 6 | 1 | 4 | 9 | 10 | 24 | 17 | 14 | 100 |
| Seventeenth | | 3 | | 1 | 1 | 1 | 1 | 2 | 5 | 4 | 3 | 5 | 26 |
| Eighteenth | | | | 2 | | 1 | | | 1 | 3 | 1 | 2 | 10 |
| Nineteenth | 1 | 2 | 1 | 2 | | 6 | 10 | 7 | 6 | 6 | 11 | 4 | 56 |
| Twentieth | 2 | 1 | 1 | 2 | 2 | 3 | | | 1 | 6 | 1 | 1 | 20 |
| Twenty-first | 10 | | 1 | | | 3 | | 1 | | 2 | 5 | | 22 |
| Twenty-second | 6 | 5 | 4 | 3 | | | 1 | 1 | 2 | 2 | 4 | 5 | 33 |
| Twenty-third | 5 | 4 | 1 | 2 | 1 | 6 | 6 | | 6 | 4 | 9 | 7 | 51 |
| Twenty-fourth | | 1 | | | | | | 1 | | 3 | 2 | 1 | 8 |
| Twenty-fifth | 4 | 3 | 2 | | | | 1 | 3 | 4 | 3 | 4 | 3 | 27 |
| Twenty-sixth | 11 | 8 | 4 | 1 | 2 | 2 | 3 | 4 | 5 | 17 | 10 | 4 | 71 |
| Twenty-seventh | 2 | 1 | 1 | 1 | | | | 2 | 1 | 1 | 3 | 4 | 16 |
| Twenty-eighth | 3 | 3 | 2 | | 1 | 1 | | | | | 3 | 2 | 15 |
| Twenty-ninth | 6 | 1 | | | 1 | 2 | | 2 | 3 | 5 | 4 | 5 | 29 |
| Thirtieth | 4 | 8 | 2 | 4 | | | 4 | 4 | 1 | 18 | 12 | 9 | 66 |
| Thirty-first | 5 | 3 | 2 | | | 2 | | 2 | 1 | 11 | 6 | 9 | 41 |
| Thirty-second | 3 | 2 | 1 | 2 | 1 | | 1 | | 1 | 5 | 4 | 6 | 26 |
| Thirty-third | 3 | 1 | 3 | 3 | 2 | 2 | 2 | 2 | 3 | 5 | 7 | 7 | 40 |
| Thirty-fourth | 19 | 6 | 6 | 5 | 2 | 5 | 1 | 8 | 6 | 16 | 8 | 11 | 93 |
| Public Institutions | 3 | 3 | 4 | 2 | | 1 | 4 | 3 | 2 | 5 | 4 | 2 | 33 |
| Total | 180 | 102 | 76 | 63 | 46 | 71 | 69 | 97 | 102 | 240 | 201 | 173 | 1420 |

IX. DEATHS FROM CONSUMPTION, BY WARDS AND MONTHS: 1895.

| CONSUMPTION DEATHS IN | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|---------------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| Ward First | 6 | 3 | 4 | 2 | 5 | 2 | 4 | 1 | 3 | 4 | 3 | 2 | 39 |
| Second | 5 | 6 | 5 | 1 | 5 | 4 | 6 | 2 | 1 | 1 | 2 | 2 | 42 |
| Third | 3 | 4 | 3 | 7 | 4 | 4 | 2 | 3 | 3 | 3 | 5 | 4 | 48 |
| Fourth | 4 | 3 | 2 | 2 | 6 | 1 | 3 | 1 | 4 | 5 | 1 | 2 | 34 |
| Fifth | 5 | 2 | 5 | 5 | 4 | 6 | 6 | 6 | 4 | 5 | 2 | 4 | 60 |
| Sixth | 6 | 16 | 4 | 6 | 7 | 5 | 5 | 13 | 10 | 10 | 5 | 8 | 95 |
| Seventh | 2 | 2 | 4 | 4 | 5 | 2 | 2 | 4 | 3 | 3 | 5 | 4 | 40 |
| Eighth | 3 | 3 | 10 | 4 | 7 | 5 | 6 | 5 | 4 | 6 | 7 | 5 | 65 |
| Ninth | 5 | 5 | 5 | 6 | 5 | 6 | 6 | 5 | 3 | 3 | 5 | 9 | 63 |
| Tenth | 5 | 8 | 11 | 8 | 10 | 6 | 6 | 3 | 6 | 6 | 6 | 2 | 79 |
| Eleventh | 7 | 5 | 4 | 5 | 5 | 8 | 2 | 4 | 3 | 3 | 4 | 2 | 54 |
| Twelfth | 4 | 6 | 6 | 9 | 9 | 12 | 8 | 4 | 9 | 9 | 5 | 6 | 87 |
| Thirteenth | 10 | 6 | 6 | 12 | 6 | 1 | 5 | 4 | 3 | 5 | 2 | 3 | 63 |
| Fourteenth | 8 | 7 | 3 | 6 | 4 | 8 | 11 | 6 | 4 | 7 | 5 | 6 | 75 |
| Fifteenth | 6 | 5 | 12 | 5 | 10 | 3 | 7 | 2 | 3 | 7 | 7 | 7 | 74 |
| Sixteenth | 4 | 3 | 9 | 5 | 10 | 1 | 3 | 2 | 9 | 5 | 3 | 7 | 61 |
| Seventeenth | 1 | 4 | 6 | 3 | 4 | 2 | 1 | 3 | 1 | 3 | 5 | 2 | 35 |
| Eighteenth | 1 | 2 | 2 | ... | 4 | 1 | 3 | 6 | ... | 4 | 2 | 2 | 27 |
| Nineteenth | 6 | 6 | 11 | 10 | 4 | 5 | 8 | 7 | 9 | 14 | 4 | 9 | 93 |
| Twentieth | 3 | 1 | 3 | 5 | 3 | 2 | 3 | 4 | 3 | 1 | 4 | 10 | 42 |
| Twenty-first | 3 | 5 | 6 | 5 | 5 | 5 | 4 | 6 | 2 | 6 | 3 | 5 | 55 |
| Twenty-second | 5 | 6 | 4 | 5 | 3 | 6 | 3 | 2 | 3 | 3 | 3 | 1 | 44 |
| Twenty-third | 1 | 7 | 4 | 5 | 4 | 2 | 6 | 3 | 5 | 9 | 3 | 5 | 54 |
| Twenty-fourth | 2 | 4 | 4 | 2 | 1 | 2 | 6 | 4 | 3 | 1 | 1 | 2 | 32 |
| Twenty-fifth | 6 | 4 | 2 | 3 | 6 | 4 | 4 | 2 | 4 | 3 | 4 | 4 | 46 |
| Twenty-sixth | 3 | 8 | 6 | 3 | 6 | 3 | 3 | 6 | 6 | 4 | 5 | 5 | 58 |
| Twenty-seventh | 1 | 3 | 3 | 2 | ... | 1 | 1 | 5 | 2 | 3 | 1 | 3 | 23 |
| Twenty-eighth | 4 | 3 | 1 | 3 | 1 | 3 | ... | 2 | 1 | 1 | 1 | 4 | 24 |
| Twenty-ninth | 5 | 2 | 3 | 4 | 4 | ... | 7 | 2 | ... | 4 | 3 | 4 | 38 |
| Thirtieth | 7 | 8 | 14 | 8 | 5 | 12 | 9 | 14 | 10 | 5 | 9 | 8 | 109 |
| Thirty-first | 5 | 2 | 6 | 7 | 2 | 5 | 5 | 4 | 1 | 2 | 5 | ... | 44 |
| Thirty-second | 6 | 5 | 2 | 2 | 7 | 2 | 4 | 2 | 6 | 3 | 7 | 2 | 48 |
| Thirty-third | 4 | 3 | 2 | 2 | 2 | 3 | 5 | 6 | 3 | 4 | 4 | 6 | 44 |
| Thirty-fourth | 8 | 7 | 7 | 7 | 8 | 9 | 4 | 2 | 5 | 5 | 4 | 2 | 68 |
| Public Institutions | 17 | 22 | 38 | 42 | 26 | 17 | 27 | 20 | 25 | 20 | 29 | 23 | 306 |
| Total | 171 | 192 | 217 | 205 | 197 | 156 | 187 | 167 | 161 | 179 | 165 | 172 | 2169 |

X. DEATHS FROM SMALLPOX, BY WARDS AND MONTHS: 1895.

| SMALLPOX DEATHS IN | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|---------------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| Ward First | | | | | | | | | | | | | |
| Second | | | | | 1 | | | | | | | | 1 |
| Third | | | | | | | | | | | | | |
| Fourth | | | | | | | | | | | | | |
| Fifth | | | | | | | | | | | | | |
| Sixth | | | | | | | | | | | | | |
| Seventh | 1 | | | | | | | | | | | | 1 |
| Eighth | | 1 | | | | | | | | | | | 1 |
| Ninth | | | | | | | | | | | | | |
| Tenth | 3 | | 1 | | | | | | | | | | 4 |
| Eleventh | 1 | | | | | | | | | | | | 1 |
| Twelfth | 1 | | | | | | | | | | | | 1 |
| Thirteenth | | | | | | | | | | | | | |
| Fourteenth | | | 1 | | | | | | | | | | 1 |
| Fifteenth | 1 | | 1 | 1 | | | 1 | 1 | | | | | 5 |
| Sixteenth | | | | 2 | | | | | | | | | 2 |
| Seventeenth | | | | | | | | | | | | | |
| Eighteenth | | | | | | | | | | | | | |
| Nineteenth | | | | | | | | | | | | | |
| Twentieth | | 1 | | | | | | | | | | | 1 |
| Twenty-first | | | | | | | | | | | | | |
| Twenty-second | | | | | | | | | | | | | |
| Twenty-third | 1 | | | 1 | | | | | | | | | 2 |
| Twenty-fourth | | | | | | | | | | | | | |
| Twenty-fifth | | | | | | | | | | | | | |
| Twenty-sixth | | | | | | | | | | | | | |
| Twenty-seventh | | | | | | | | | | | | | |
| Twenty-eighth | | | | | | | | | | | | | |
| Twenty-ninth | | | | | | | | | | | | | |
| Thirtieth | | 1 | | | | | | | | | | | 1 |
| Thirty-first | 1 | | | | | | | | | | | | 1 |
| Thirty-second | | | | | | | | | | | | | |
| Thirty-third | | | | | | | | | | | | | |
| Thirty-fourth | | | | | | | | | | | | | |
| Public Institutions | 47 | 20 | 30 | 10 | 14 | 2 | 2 | 6 | 2 | | | 2 | 135 |
| □ | | | | | | | | | | | | | |
| Total | 56 | 23 | 33 | 14 | 15 | 2 | 3 | 7 | 2 | | | 2 | 157 |

XI. DEATHS FROM BRONCHITIS, BY WARDS AND MONTHS: 1895.

| BRONCHITIS DEATHS IN | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|---------------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| Ward First | 3 | 3 | 1 | 3 | 2 | | | | | | | 3 | 15 |
| Second | 3 | 8 | 1 | 2 | | | 2 | 1 | | | | | 17 |
| Third | 2 | 2 | 8 | | 2 | 1 | 1 | | | 2 | | 1 | 19 |
| Fourth | 2 | 6 | 1 | | 1 | 1 | 3 | | 1 | | | 3 | 18 |
| Fifth | 6 | 10 | 5 | 3 | 6 | 1 | | 1 | | | 1 | 7 | 41 |
| Sixth | 14 | 15 | 9 | 5 | 3 | 4 | 2 | | 1 | 4 | 8 | 5 | 70 |
| Seventh | 4 | 5 | 1 | 1 | 2 | 2 | 1 | 2 | | 2 | 3 | 1 | 26 |
| Eighth | 7 | 1 | 7 | 8 | 1 | 1 | | 3 | 4 | 2 | 2 | 1 | 35 |
| Ninth | 13 | 10 | 8 | 3 | 8 | 1 | 4 | 2 | 1 | 3 | 2 | 3 | 58 |
| Tenth | 8 | 15 | 7 | 6 | 3 | 2 | 1 | 1 | 4 | 5 | 6 | 5 | 63 |
| Eleventh | 2 | 3 | 4 | 2 | 1 | | 1 | 1 | 1 | | 2 | 2 | 19 |
| Twelfth | 6 | 11 | 3 | 2 | | 4 | | 1 | | 2 | 3 | 4 | 36 |
| Thirteenth | 6 | 3 | 7 | 3 | 1 | 2 | 2 | 1 | | 2 | 2 | | 29 |
| Fourteenth | 14 | 11 | 9 | 7 | 6 | 1 | 1 | 4 | 2 | 4 | 4 | 3 | 66 |
| Fifteenth | 2 | 8 | 10 | 2 | 2 | | 2 | 1 | 2 | 4 | 1 | 3 | 38 |
| Sixteenth | 15 | 16 | 6 | 9 | 7 | | 7 | 4 | 4 | 4 | 9 | 4 | 87 |
| Seventeenth | 3 | 3 | 3 | 7 | 1 | 6 | | | 2 | | 3 | | 28 |
| Eighteenth | 3 | 2 | 4 | 2 | 1 | | | | | 1 | 1 | 1 | 15 |
| Nineteenth | 4 | 19 | 9 | 7 | 4 | 4 | 2 | 1 | 2 | 2 | 8 | 3 | 65 |
| Twentieth | 2 | 1 | 3 | | | | | | 2 | 1 | 1 | 1 | 11 |
| Twenty-first | 3 | 2 | 3 | 1 | 2 | 1 | 1 | | 1 | 1 | 2 | | 17 |
| Twenty-second | 1 | 4 | 1 | | 3 | 1 | 1 | 1 | 1 | 1 | | 1 | 15 |
| Twenty-third | 3 | 9 | 6 | 9 | 5 | 4 | 2 | 1 | 2 | | 1 | 4 | 46 |
| Twenty-fourth | | 4 | 1 | 1 | 3 | | | 2 | 1 | | 1 | | 13 |
| Twenty-fifth | 2 | 3 | | 1 | 1 | 1 | 1 | | | | | 2 | 11 |
| Twenty-sixth | 4 | 4 | 5 | 1 | 5 | 2 | 1 | | | 2 | 2 | 2 | 28 |
| Twenty-seventh | 2 | 2 | | 1 | 2 | 1 | 1 | | | | 1 | | 10 |
| Twenty-eighth | 1 | 2 | 3 | | | 1 | | 1 | | | 2 | 1 | 11 |
| Twenty-ninth | 5 | 7 | 2 | 1 | 3 | 1 | 2 | 2 | | 2 | | 2 | 27 |
| Thirtieth | 8 | 9 | 8 | 4 | 6 | 5 | 4 | 4 | 2 | 5 | 5 | 7 | 67 |
| Thirty-first | 4 | 1 | 3 | 2 | 2 | 1 | 3 | 1 | | 1 | 2 | 2 | 22 |
| Thirty-second | 1 | 2 | 2 | 1 | 2 | | | 3 | | | | 1 | 12 |
| Thirty-third | 2 | 9 | 10 | 1 | 1 | | 4 | | 1 | | 5 | 4 | 37 |
| Thirty-fourth | 11 | 8 | 3 | | | 1 | | 2 | 2 | 3 | 2 | 2 | 34 |
| Public Institutions | 4 | 8 | 3 | 2 | 1 | 2 | | | 1 | 3 | 1 | 2 | 27 |
| Total | 170 | 226 | 156 | 97 | 89 | 53 | 49 | 41 | 38 | 56 | 78 | 80 | 1133 |

XII. DEATHS FROM PNEUMONIA, BY WARDS AND MONTHS: 1895.

| PNEUMONIA DEATHS IN | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|---------------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| Ward First | 3 | 7 | 3 | 6 | 3 | 2 | .... | 1 | .... | 4 | 3 | 3 | 35 |
| Second | 4 | 6 | 3 | 1 | 2 | .... | 1 | 1 | 1 | 3 | 4 | 3 | 29 |
| Third | 3 | 8 | 3 | 5 | 4 | 3 | .... | 1 | .... | 4 | 2 | 3 | 36 |
| Fourth | 7 | 10 | 4 | 3 | 3 | 3 | .... | 1 | 2 | 2 | 1 | 1 | 37 |
| Fifth | 19 | 15 | 10 | 9 | 10 | 2 | 1 | 3 | 1 | 3 | 4 | 3 | 80 |
| Sixth | 15 | 13 | 15 | 15 | 9 | 11 | 7 | 3 | 4 | 8 | 7 | 6 | 113 |
| Seventh | 8 | 15 | 10 | 10 | 5 | 2 | 1 | 4 | 1 | 3 | 8 | 7 | 74 |
| Eighth | 4 | 13 | 10 | 7 | 7 | 1 | 2 | 4 | 1 | 3 | 4 | 4 | 60 |
| Ninth | 11 | 15 | 7 | 10 | 3 | 3 | 4 | 2 | 4 | 6 | 2 | 10 | 77 |
| Tenth | 11 | 26 | 11 | 11 | 17 | 8 | 3 | 1 | 3 | 9 | 7 | 7 | 114 |
| Eleventh | 4 | 2 | 8 | 6 | 4 | 2 | 2 | .... | .... | 2 | 6 | 3 | 39 |
| Twelfth | 5 | 13 | 10 | 11 | 4 | 1 | 5 | 1 | 2 | 3 | 4 | 2 | 61 |
| Thirteenth | 10 | 11 | 5 | 14 | 4 | 2 | 2 | 5 | .... | 6 | 5 | 3 | 67 |
| Fourteenth | 5 | 18 | 12 | 18 | 9 | 4 | 1 | 4 | 3 | 1 | 2 | 2 | 79 |
| Fifteenth | 10 | 8 | 18 | 21 | 8 | 4 | 3 | 5 | 3 | 8 | 6 | 9 | 103 |
| Sixteenth | 10 | 12 | 19 | 14 | 7 | 4 | 2 | 3 | 8 | 11 | 11 | 7 | 108 |
| Seventeenth | 4 | 5 | 6 | 11 | 6 | .... | 1 | .... | .... | 1 | 5 | 3 | 42 |
| Eighteenth | 4 | 6 | 4 | 4 | 4 | .... | 5 | 2 | 4 | 2 | .... | .... | 35 |
| Nineteenth | 12 | 18 | 11 | 10 | 4 | 5 | 4 | 1 | 1 | 3 | 3 | 3 | 75 |
| Twentieth ..... | .... | 2 | 11 | 4 | 2 | 2 | .... | 1 | 2 | 3 | 4 | .... | 31 |
| Twenty-first | 5 | 5 | 6 | 9 | 6 | 1 | 1 | .... | 2 | 1 | 3 | 6 | 45 |
| Twenty-second | 5 | 8 | 9 | 3 | 5 | .... | 1 | 4 | .... | 4 | 4 | 2 | 45 |
| Twenty-third | 4 | 16 | 5 | 6 | 2 | 3 | 3 | 3 | 1 | 2 | 3 | 6 | 54 |
| Twenty-fourth | 3 | 7 | 6 | 3 | 1 | .... | 1 | 1 | 1 | .... | 3 | 1 | 27 |
| Twenty-fifth | 4 | 2 | 5 | 4 | 2 | 3 | 3 | .... | 3 | 3 | 4 | 1 | 34 |
| Twenty-sixth | 10 | 15 | 9 | 11 | 9 | 5 | .... | 1 | 2 | 5 | 4 | 4 | 75 |
| Twenty-seventh | 3 | 6 | 4 | 3 | 1 | .... | 1 | 3 | .... | 3 | 1 | 3 | 28 |
| Twenty-eighth | 4 | 9 | 5 | .... | 3 | 4 | 2 | 2 | 1 | 2 | 2 | 3 | 37 |
| Twenty-ninth | 8 | 17 | 6 | 9 | 5 | 2 | 1 | 1 | 2 | 8 | 6 | 6 | 71 |
| Thirtieth | 21 | 20 | 21 | 13 | 10 | 5 | 10 | 5 | 2 | 5 | 9 | 3 | 124 |
| Thirty-first | 6 | 12 | 9 | 11 | 8 | .... | 1 | .... | 1 | 4 | 3 | 4 | 59 |
| Thirty-second | 7 | 10 | 13 | 2 | 5 | 1 | 1 | 1 | 2 | 1 | 6 | 2 | 51 |
| Thirty-third | 10 | 17 | 9 | 5 | 4 | 3 | .... | 4 | 1 | 4 | 6 | 5 | 68 |
| Thirty-fourth | 13 | 16 | 8 | 8 | 7 | 5 | .... | 1 | 2 | 6 | 2 | 3 | 71 |
| Public Institutions | 25 | 61 | 42 | 42 | 27 | 16 | 4 | 10 | 8 | 7 | 14 | 19 | 275 |
| Total | 277 | 444 | 337 | 319 | 210 | 107 | 73 | 79 | 68 | 140 | 158 | 147 | 2359 |

XIII. DEATHS FROM SCARLET FEVER, BY WARDS AND MONTHS: 1895.

| SCARLET-FEVER DEATHS IN | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|-------------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| Ward First | | | | | | | | | | | | | 1 |
| Second | | 1 | | | | | | | | | | | 1 |
| Third | | | | | | | | | | | | | |
| Fourth | | | | | | | | | | | | | |
| Fifth | | 1 | | | | | | 1 | 1 | | | 1 | 4 |
| Sixth | | 1 | | | | | | 2 | 1 | | | 1 | 5 |
| Seventh | | | | | | | | | | | | | |
| Eighth | | | | | | | | | | | | | |
| Ninth | | | | 1 | | | | | | | | 1 | 2 |
| Tenth | 3 | | | 1 | | 2 | 1 | | | | | | 7 |
| Eleventh | | 1 | | 1 | | | | | | | | | 1 |
| Twelfth | 1 | | | | | | | | | | 2 | | 3 |
| Thirteenth | | 1 | | 4 | 1 | | | | 1 | | | | 7 |
| Fourteenth | 2 | 1 | | | 1 | | | 1 | 1 | | | | 6 |
| Fifteenth | 2 | | | | | | | 2 | | | | 1 | 5 |
| Sixteenth | | | | | | 1 | | | | | | | 1 |
| Seventeenth | | 1 | | | | | | | | | | | 1 |
| Eighteenth | 1 | | | | | | | | | | | | 1 |
| Nineteenth | | | | | | | | | 1 | | | | 1 |
| Twentieth | | | | | 1 | | | | | | | | 1 |
| Twenty-first | 1 | | | | 1 | | | | | | | | 2 |
| Twenty-second | | 1 | 1 | | | | | | | | 1 | | 3 |
| Twenty-third | | | | | | | | | | | | | |
| Twenty-fourth | | | | | | | | | | | | | |
| Twenty-fifth | 2 | | | 2 | | | | | | | | | 4 |
| Twenty-sixth | 1 | | | | | | 2 | | | | | | 3 |
| Twenty-seventh | | 1 | | | | | | | | | | | 1 |
| Twenty-eighth | | | | | | | | | | 1 | | | 1 |
| Twenty-ninth | | | | | 2 | 1 | 1 | | | | | | 4 |
| Thirtieth | | | 1 | | | | | 1 | 1 | | | | 3 |
| Thirty-first | 1 | 1 | | | | | | | | | | | 2 |
| Thirty-second | | 1 | | 1 | 1 | 1 | | | 1 | | | | 5 |
| Thirty-third | | | | | | | | | | | | | |
| Thirty-fourth | | | | | | | | | | | | 1 | 1 |
| Public Institutions | 1 | | | | | | | 1 | | | | | 2 |
| Total | 15 | 11 | 2 | 9 | 7 | 5 | 4 | 8 | 7 | 1 | 3 | 5 | 77 |

XIV. DEATHS FROM FEBRILE OR ZYMOTIC DISEASES, BY WARDS
AND MONTHS : 1895.

| FEBRILE OR ZYMOTIC DEATHS IN | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|---------------------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| Ward First | 1 | 2 | .... | 3 | 3 | 1 | .... | .... | 1 | 1 | 2 | 1 | 15 |
| Second | 1 | 11 | .... | 4 | .... | 2 | .... | .... | 1 | 1 | .... | 2 | 22 |
| Third | 3 | 3 | 4 | 2 | .... | 1 | 23 | 2 | .... | .... | .... | 1 | 19 |
| Fourth | 6 | 7 | 6 | 3 | 3 | 4 | 22 | 1 | .... | 1 | 3 | 4 | 40 |
| Fifth | 10 | 5 | 16 | 2 | 2 | 4 | 1 | 8 | 6 | 8 | 3 | 4 | 69 |
| Sixth | 7 | 6 | 10 | 10 | 4 | 4 | 10 | 9 | 12 | 16 | 12 | 12 | 118 |
| Seventh | 9 | 6 | 4 | 2 | 1 | 3 | 3 | 13 | 10 | 11 | 8 | 9 | 79 |
| Eighth | 9 | 6 | 5 | 6 | 1 | 7 | 22 | 7 | 5 | 4 | 10 | 5 | 67 |
| Ninth | 8 | 8 | 11 | 5 | 1 | 1 | 4 | 8 | 7 | 10 | 4 | 3 | 70 |
| Tenth | 30 | 12 | 7 | 7 | 6 | 11 | 8 | 7 | 11 | 14 | 9 | 12 | 134 |
| Eleventh | 4 | 2 | 4 | 3 | 4 | 3 | 4 | 7 | .... | 9 | 10 | 4 | 54 |
| Twelfth | 6 | 9 | 12 | 10 | 10 | 4 | 4 | 4 | 6 | 14 | 6 | 6 | 91 |
| Thirteenth | 9 | 7 | 7 | 9 | 4 | 9 | 6 | 5 | 5 | 12 | 8 | 5 | 86 |
| Fourteenth | 16 | 8 | 8 | 9 | 8 | 5 | 6 | 7 | 5 | 18 | 13 | 13 | 116 |
| Fifteenth | 18 | 8 | 10 | 6 | 6 | 3 | 11 | 11 | 11 | 16 | 14 | 17 | 131 |
| Sixteenth | 11 | 6 | 5 | 8 | 6 | 5 | 8 | 13 | 13 | 27 | 18 | 14 | 134 |
| Seventeenth | 1 | 4 | 5 | 2 | 2 | 1 | 1 | 3 | 6 | 6 | 4 | 5 | 40 |
| Eighteenth | 3 | 3 | 1 | 2 | .... | 2 | 1 | .... | 2 | 4 | 3 | 2 | 23 |
| Nineteenth | 5 | 9 | 3 | 3 | .... | 8 | 18 | 8 | 9 | 16 | 12 | 6 | 97 |
| Twentieth | 2 | 5 | 2 | 2 | 6 | 4 | .... | 1 | 3 | 8 | 2 | 3 | 38 |
| Twenty-first | 13 | 1 | 4 | 1 | 3 | 4 | .... | 4 | 2 | 4 | 7 | 2 | 45 |
| Twenty-second | 10 | 10 | 8 | 5 | 1 | .... | 4 | 2 | 3 | 2 | 6 | 6 | 57 |
| Twenty-third | 8 | 8 | 4 | 5 | 7 | 7 | .... | 1 | 6 | 7 | 10 | 9 | 72 |
| Twenty-fourth ..... | .... | 4 | 1 | .... | 2 | .... | 7 | 1 | 1 | 6 | 5 | 1 | 28 |
| Twenty-fifth | 12 | 7 | 2 | 5 | 2 | 2 | 1 | 4 | 8 | 4 | 6 | 5 | 58 |
| Twenty-sixth | 13 | 13 | 9 | 2 | 4 | 3 | 6 | 5 | 5 | 20 | 11 | 6 | 97 |
| Twenty-seventh | 2 | 2 | 5 | 1 | 2 | 1 | 1 | 3 | 3 | 2 | 5 | 5 | 32 |
| Twenty-eighth | 4 | 3 | 6 | 1 | 1 | 1 | 2 | .... | 1 | 3 | 3 | 3 | 28 |
| Twenty-ninth | 7 | 7 | 3 | 4 | 5 | 4 | 2 | 5 | 7 | 7 | 5 | 7 | 63 |
| Thirtieth | 10 | 16 | 9 | 9 | 13 | 1 | 5 | 8 | 4 | 22 | 20 | 11 | 128 |
| Thirty-first | 7 | 9 | 5 | 3 | 5 | 5 | 1 | 4 | 1 | 13 | 10 | 9 | 72 |
| Thirty-second | 7 | 6 | 1 | 3 | 6 | 2 | 2 | 1 | 3 | 6 | 5 | 8 | 50 |
| Thirty-third | 4 | 5 | 4 | 4 | 4 | 3 | 6 | 6 | 8 | 9 | 11 | 13 | 77 |
| Thirty-fourth | 22 | 11 | 10 | 8 | 6 | 9 | 5 | 12 | 8 | 18 | 11 | 13 | 133 |
| Public Institutions | 56 | 30 | 42 | 17 | 16 | 5 | 15 | 22 | 32 | 34 | 18 | 13 | 300 |
| Total | 334 | 259 | 233 | 166 | 144 | 129 | 149 | 192 | 205 | 353 | 280 | 239 | 2683 |

XV. DEATHS FROM TYPHOID FEVER, BY WARDS AND MONTHS: 1895.

| TYPHOID-FEVER DEATHS IN | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|---------------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| Ward First | 1 | ... | ... | ... | 1 | ... | ... | ... | ... | 1 | 2 | 1 | 6 |
| Second | ... | 2 | ... | ... | ... | ... | 1 | 1 | 1 | ... | ... | ... | 3 |
| Third | ... | 1 | ... | ... | ... | ... | 1 | 1 | ... | ... | ... | ... | 3 |
| Fourth | ... | 2 | 1 | 1 | 1 | ... | 1 | 1 | ... | ... | 1 | 1 | 9 |
| Fifth | 3 | ... | ... | ... | ... | 2 | ... | 4 | 1 | 3 | ... | ... | 13 |
| Sixth | 2 | ... | 2 | 1 | 1 | 1 | 2 | 2 | 4 | 4 | 3 | 3 | 25 |
| Seventh | 1 | ... | ... | ... | 1 | ... | ... | 1 | 2 | 3 | ... | 1 | 9 |
| Eighth | ... | ... | 2 | 1 | ... | 1 | ... | 4 | 2 | ... | 1 | ... | 11 |
| Ninth | 1 | ... | 1 | ... | ... | ... | 1 | 3 | 1 | 2 | 1 | ... | 10 |
| Tenth | ... | ... | ... | 1 | 1 | ... | 1 | ... | 4 | ... | ... | 2 | 14 |
| Eleventh | ... | ... | ... | 1 | ... | 2 | 1 | 1 | ... | 2 | 2 | 1 | 8 |
| Twelfth | ... | 1 | 1 | 3 | 2 | ... | ... | 2 | 3 | ... | 2 | 2 | 25 |
| Thirteenth | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | ... | 2 | 1 | 1 | 14 |
| Fourteenth | ... | ... | ... | 1 | ... | ... | 2 | 4 | 2 | 1 | 1 | 1 | 12 |
| Fifteenth | 3 | 1 | 2 | 1 | 2 | 1 | 5 | 2 | 2 | 2 | ... | 1 | 22 |
| Sixteenth | 1 | ... | 1 | 3 | 3 | ... | 1 | 4 | 3 | 2 | 1 | ... | 19 |
| Seventeenth | 1 | ... | ... | 1 | 1 | ... | ... | 1 | 1 | 1 | ... | ... | 6 |
| Eighteenth | 1 | ... | ... | ... | ... | 1 | ... | ... | 1 | 1 | 1 | ... | 5 |
| Nineteenth | 1 | 1 | 1 | ... | ... | ... | 2 | ... | 2 | 7 | 1 | 2 | 17 |
| Twentieth | ... | 1 | 1 | ... | 2 | 1 | ... | ... | 2 | 2 | 1 | 2 | 12 |
| Twenty-first | 1 | ... | ... | ... | ... | ... | ... | 3 | 2 | 1 | 2 | 1 | 10 |
| Twenty-second | 2 | 1 | 1 | 2 | 1 | ... | 2 | ... | ... | ... | 1 | ... | 10 |
| Twenty-third | 1 | 2 | 2 | ... | 1 | 1 | 1 | ... | ... | 2 | 1 | 1 | 12 |
| Twenty-fourth | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 3 | 3 | ... | 7 |
| Twenty-fifth | ... | 1 | ... | ... | 1 | ... | ... | 1 | 4 | ... | 2 | 2 | 11 |
| Twenty-sixth | 1 | ... | 2 | ... | 1 | ... | 1 | ... | ... | 3 | 1 | 1 | 10 |
| Twenty-seventh | ... | ... | 1 | ... | ... | 1 | ... | 1 | 1 | ... | 2 | 1 | 7 |
| Twenty-eighth | ... | ... | ... | ... | ... | ... | 1 | ... | 1 | ... | ... | 1 | 3 |
| Twenty-ninth | ... | ... | ... | 3 | ... | 1 | 1 | 2 | 4 | 2 | 1 | 2 | 16 |
| Thirtieth | 3 | ... | 1 | 2 | 1 | ... | ... | 2 | 1 | 2 | 5 | 2 | 19 |
| Thirty-first | ... | ... | ... | 1 | 1 | 2 | 1 | 1 | ... | 4 | ... | ... | 10 |
| Thirty-second | 2 | ... | ... | ... | 3 | 1 | ... | 1 | 1 | 1 | 1 | 2 | 12 |
| Thirty-third | ... | 1 | ... | ... | 1 | ... | 1 | 3 | 1 | 2 | 1 | 2 | 12 |
| Thirty-fourth | 1 | ... | 2 | 1 | 2 | 1 | ... | 3 | 2 | 2 | 3 | ... | 17 |
| Public Institutions | 3 | 6 | 4 | 5 | 2 | 1 | 9 | 11 | 27 | 29 | 13 | 9 | 119 |
| Total | 30 | 21 | 26 | 30 | 30 | 18 | 36 | 59 | 76 | 90 | 60 | 42 | 518 |

**XVI. COMPARATIVE MORTALITY FROM SPECIFIED DISEASES AND
MORTALITY OF CHILDREN, BY QUARTERS FOR
TEN YEARS: 1886-1895.**

| CAUSE OF DEATH. | WINTER QUARTER, 1895. | | | TOTAL WINTER MORTALITY FOR THE YEARS | | | | | | | | | |
|-------------------------------------|-----------------------------|-----------|--------|---|------|------|------|------|------|------|------|------|------|
| | January. | February. | March. | 1895 | 1894 | 1893 | 1892 | 1891 | 1890 | 1889 | 1888 | 1887 | 1886 |
| Smallpox | 56 | 23 | 33 | 112 | 184 | 1 | ... | ... | ... | ... | ... | ... | 2 |
| Measles | 21 | 19 | 18 | 58 | 45 | 100 | 22 | 102 | 5 | 96 | 9 | 145 | 13 |
| Scarlet fever | 15 | 11 | 2 | 28 | 69 | 129 | 152 | 160 | 74 | 51 | 41 | 66 | 70 |
| Diphtheria | 180 | 102 | 76 | 358 | 168 | 218 | 288 | 258 | 314 | 295 | 229 | 260 | 185 |
| Croup | 31 | 24 | 23 | 78 | 108 | 147 | 138 | 110 | 115 | 85 | 185 | 125 | 86 |
| Whooping cough | 19 | 13 | 8 | 40 | 37 | 33 | 41 | 64 | 55 | 20 | 60 | 14 | 27 |
| Fever, typhoid | 30 | 21 | 26 | 77 | 99 | 112 | 574 | 199 | 292 | 66 | 50 | 91 | 80 |
| cerebro spinal | ... | 6 | ... | 6 | 58 | 94 | 80 | 67 | 33 | 25 | 26 | 11 | 32 |
| malarial | 5 | 3 | 4 | 12 | 8 | 13 | 26 | 32 | 31 | 17 | 16 | 23 | 21 |
| Diarrheal diseases | 11 | 7 | 14 | 32 | 44 | 93 | 113 | 141 | 151 | 29 | 38 | 79 | 43 |
| Other febrile or zymotic | 8 | 61 | 65 | 134 | 31 | 60 | 92 | 90 | 57 | 47 | 72 | 54 | 61 |
| Phthisis pulmonalis | 171 | 192 | 217 | 580 | 505 | 609 | 584 | 563 | 593 | 358 | 380 | 386 | 290 |
| Acute lung diseases | 447 | 670 | 493 | 1610 | 686 | 1486 | 1684 | 1927 | 1802 | 694 | 873 | 712 | 559 |
| Total | 994 | 1152 | 979 | 3125 | 2042 | 3095 | 3794 | 3713 | 3522 | 1783 | 1979 | 1966 | 1469 |
| Children under five years | 954 | 1008 | 797 | 2759 | 3095 | 3000 | 2966 | 3332 | 2953 | 1734 | 1810 | 1858 | 1574 |

COMPARATIVE MORTALITY OF SPRING QUARTER.

| CAUSE OF DEATH. | SPRING QUARTER, 1895. | | | TOTAL SPRING MORTALITY FOR THE YEARS | | | | | | | | | |
|-------------------------------------|-----------------------------|------|-------|---|------|------|------|------|------|------|------|------|------|
| | April. | May. | June. | 1895 | 1894 | 1893 | 1892 | 1891 | 1890 | 1889 | 1888 | 1887 | 1886 |
| Smallpox | 14 | 15 | 2 | 31 | 581 | 1 | 2 | ... | ... | 2 | ... | 2 | ... |
| Measles | 24 | 21 | 24 | 69 | 63 | 92 | 37 | 102 | 17 | 77 | 40 | 149 | 28 |
| Scarlet fever | 9 | 7 | 5 | 21 | 47 | 85 | 99 | 108 | 42 | 55 | 50 | 39 | 64 |
| Diphtheria | 63 | 46 | 31 | 140 | 125 | 214 | 183 | 145 | 183 | 246 | 179 | 196 | 214 |
| Croup | 21 | 9 | 9 | 39 | 79 | 103 | 81 | 87 | 74 | 65 | 98 | 83 | 58 |
| Whooping cough | 6 | 9 | 5 | 20 | 52 | 59 | 36 | 57 | 31 | 19 | 49 | 14 | 28 |
| Fever, typhoid | 30 | 30 | 18 | 78 | 92 | 174 | 181 | 711 | 234 | 46 | 54 | 71 | 112 |
| cerebro spinal | ... | 1 | ... | 1 | 72 | 140 | 54 | 121 | 44 | 30 | 68 | 19 | 34 |
| malarial | 3 | 3 | 2 | 12 | 9 | 26 | 31 | 47 | 33 | 13 | 29 | 15 | 19 |
| Diarrheal diseases | 15 | 36 | 197 | 248 | 205 | 172 | 262 | 350 | 177 | 88 | 129 | 233 | 162 |
| Other febrile or zymotic | 17 | 8 | 2 | 27 | 13 | 63 | 76 | 68 | 57 | 40 | 36 | 46 | 42 |
| Phthisis pulmonalis | 205 | 197 | 156 | 558 | 616 | 649 | 570 | 592 | 478 | 344 | 395 | 332 | 364 |
| Acute lung diseases | 416 | 299 | 160 | 875 | 992 | 1214 | 897 | 1416 | 878 | 496 | 527 | 516 | 513 |
| Total | 823 | 685 | 611 | 2119 | 2946 | 2992 | 2509 | 3804 | 2248 | 1519 | 1657 | 1715 | 1638 |
| Children under five years | 681 | 706 | 798 | 2185 | 2992 | 2787 | 2676 | 3542 | 1990 | 1489 | 1638 | 1726 | 1557 |

COMPARATIVE MORTALITY OF SUMMER QUARTER.

| CAUSE OF DEATH. | SUMMER QUARTER, 1895. | | | TOTAL SUMMER MORTALITY FOR THE YEARS | | | | | | | | | |
|---------------------------------|-----------------------|---------|------------|--------------------------------------|------|------|------|------|------|------|------|------|------|
| | July. | August. | September. | 1895 | 1894 | 1893 | 1892 | 1891 | 1890 | 1889 | 1888 | 1887 | 1886 |
| Smallpox | 3 | 7 | 2 | 12 | 135 | 2 | .... | .... | .... | .... | .... | .... | .... |
| Measles | 14 | 3 | 2 | 19 | 45 | 21 | 41 | 41 | 12 | 25 | 52 | 38 | 51 |
| Scarlet fever | 4 | 8 | 7 | 19 | 41 | 48 | 53 | 81 | 30 | 39 | 41 | 57 | 40 |
| Diphtheria | 69 | 97 | 102 | 268 | 172 | 170 | 138 | 187 | 156 | 203 | 158 | 205 | 190 |
| Croup | 18 | 17 | 32 | 67 | 100 | 85 | 92 | 71 | 64 | 56 | 64 | 56 | 60 |
| Whooping cough | 14 | 12 | 13 | 39 | 97 | 86 | 58 | 43 | 71 | 35 | 54 | 47 | 44 |
| Fever, typhoid | 36 | 59 | 76 | 171 | 160 | 217 | 528 | 580 | 296 | 170 | 142 | 123 | 147 |
| cerebro-spinal ..... | .... | .... | .... | .... | 74 | 92 | 58 | 57 | 39 | 29 | 30 | 22 | 25 |
| malarial | 5 | 6 | 3 | 14 | 7 | 18 | 61 | 32 | 32 | 25 | 34 | 23 | 34 |
| Diarrheal diseases | 591 | 354 | 308 | 1253 | 2285 | 1802 | 1347 | 1286 | 1284 | 1350 | 1018 | 1036 | 841 |
| Other febrile or zymotic | 4 | .... | .... | 4 | 2 | 40 | 53 | 40 | 31 | 38 | 26 | 32 | 36 |
| Phthisis pulmonalis | 187 | 167 | 161 | 515 | 546 | 531 | 498 | 469 | 470 | 378 | 322 | 328 | 264 |
| Acute lung diseases | 122 | 120 | 106 | 348 | 364 | 399 | 491 | 351 | 302 | 269 | 232 | 222 | 223 |
| Total | 1067 | 850 | 812 | 2729 | 4028 | 3511 | 3418 | 3238 | 2787 | 2617 | 2173 | 2189 | 1955 |
| Children under five years | 1412 | 1030 | 1015 | 3457 | 3511 | 4418 | 3763 | 3468 | 3174 | 3076 | 2714 | 2556 | 2256 |

COMPARATIVE MORTALITY OF AUTUMN QUARTER.

| CAUSE OF DEATH. | AUTUMN QUARTER, 1895. | | | TOTAL AUTUMN MORTALITY FOR THE YEARS | | | | | | | | | |
|---------------------------------|-----------------------|-----------|-----------|--------------------------------------|------|------|------|------|------|------|------|------|------|
| | October. | November. | December. | 1895 | 1894 | 1893 | 1892 | 1891 | 1890 | 1889 | 1888 | 1887 | 1886 |
| Smallpox ..... | .... | .... | 2 | 2 | 133 | 19 | .... | .... | .... | .... | .... | .... | .... |
| Measles | 2 | 4 | 4 | 10 | 29 | 21 | 85 | 20 | 38 | 6 | 50 | 9 | 34 |
| Scarlet fever | 1 | 3 | 5 | 9 | 23 | 67 | 78 | 150 | 47 | 40 | 52 | 28 | 46 |
| Diphtheria | 240 | 201 | 173 | 614 | 376 | 273 | 405 | 368 | 228 | 382 | 292 | 341 | 355 |
| Croup | 14 | 11 | 3 | 28 | 278 | 157 | 223 | 132 | 127 | 177 | 92 | 139 | 155 |
| Whooping cough | 11 | 6 | 6 | 23 | 24 | 32 | 29 | 30 | 44 | 22 | 20 | 29 | 13 |
| Fever, typhoid | 90 | 60 | 42 | 192 | 141 | 167 | 206 | 507 | 186 | 171 | 129 | 96 | 147 |
| cerebro-spinal | 1 | .... | .... | 1 | 45 | 62 | 31 | 56 | 26 | 26 | 14 | 29 | 12 |
| malarial | 7 | 4 | 7 | 18 | 10 | 26 | 21 | 32 | 25 | 50 | 17 | 24 | 33 |
| Diarrheal diseases | 73 | 19 | 13 | 105 | 402 | 157 | 145 | 218 | 105 | 151 | 71 | 71 | 88 |
| Other febrile or zymotic ..... | .... | 1 | 2 | 3 | 9 | 35 | 55 | 62 | 53 | 37 | 32 | 24 | 42 |
| Phthisis pulmonalis | 179 | 165 | 172 | 516 | 488 | 526 | 525 | 496 | 431 | 409 | 329 | 306 | 281 |
| Acute lung diseases | 196 | 236 | 227 | 659 | 664 | 925 | 832 | 873 | 709 | 616 | 543 | 402 | 388 |
| Total | 814 | 710 | 656 | 2180 | 2632 | 2467 | 2635 | 2944 | 2019 | 2087 | 1641 | 1498 | 1594 |
| Children under five years | 820 | 616 | 615 | 2051 | 2477 | 2158 | 2257 | 2459 | 1836 | 1905 | 1331 | 1025 | 1376 |

**XVII. DEATHS FROM THE PRINCIPAL CAUSES AND PERCENTAGES
OF DEATHS FROM ALL CAUSES: 1892-1895.**

| CAUSES OF DEATH. | 1895. | | 1894. | | 1893. | | 1892. | |
|----------------------------------|-------------------|--------------------------|-------------------|--------------------------|-------------------|--------------------------|-------------------|--------------------------|
| | Number of deaths. | Per cent. of all causes. | Number of deaths. | Per cent. of all causes. | Number of deaths. | Per cent. of all causes. | Number of deaths. | Per cent. of all causes. |
| Diarrheal diseases | 1638 | 6.77 | 2936 | 12.28 | 2224 | 8.21 | 1867 | 7.12 |
| Consumption | 2169 | 8.96 | 2155 | 9.01 | 2315 | 8.55 | 2177 | 8.31 |
| Pneumonia | 2359 | 9.74 | 1521 | 6.39 | 2457 | 9.10 | 2397 | 9.15 |
| Brain diseases | 1260 | 5.20 | 1243 | 5.20 | 1276 | 4.73 | 1187 | 4.53 |
| Convulsions | 1113 | 4.60 | 1189 | 4.97 | 1326 | 4.90 | 1560 | 5.95 |
| Bronchitis | 1133 | 4.68 | 1185 | 4.98 | 1395 | 5.17 | 1303 | 4.97 |
| Heart diseases | 1306 | 5.39 | 1038 | 4.32 | 1177 | 4.35 | 856 | 3.26 |
| Smallpox | 157 | .65 | 1033 | 4.32 | 23 | .08 | 2 | ..... |
| Diphtheria [<i>a</i>] | 1420 | 5.87 | 841 | 3.53 | 975 | 3.60 | 1014 | 3.86 |
| Cancerous diseases | 682 | 2.82 | 640 | 2.69 | 657 | 2.43 | 546 | 2.08 |
| Croup | 212 | .87 | 565 | 2.37 | 492 | 1.82 | 534 | 2.03 |
| Typhoid fever | 518 | 2.14 | 492 | 2.06 | 670 | 2.47 | 1489 | 5.67 |
| Old age | 423 | 1.75 | 409 | 1.72 | 518 | 1.91 | 429 | 1.63 |
| Chronic nephritis | 511 | 2.11 | 344 | 1.43 | 257 | .95 | 249 | .95 |
| Whooping cough | 122 | .50 | 210 | .88 | 210 | .78 | 164 | .63 |
| Scarlet fever | 77 | .32 | 190 | .79 | 329 | 1.21 | 382 | 1.45 |
| Measles | 156 | .65 | 182 | .76 | 234 | .86 | 185 | .70 |
| Puerperal affections | 301 | 1.24 | 175 | .73 | 307 | 1.13 | 199 | .76 |
| Violence | 1450 | 6.00 | 1541 | 6.44 | 1879 | 6.93 | 1573 | 5.99 |
| All other causes | 6312 | 26.08 | 6003 | 25.13 | 8362 | 30.97 | 8106 | 30.94 |
| Total | 24219 | ..... | 23892 | ..... | 27083 | ..... | 26219 | ..... |
| Annual death rate per 1000 ..... | ..... | 15.14 | ..... | 15.24 | ..... | 16.92 | ..... | 118.23 |

a] Exclusive of *Croup* returned as such.

**XVIII. DEATHS FROM THE PRINCIPAL FEBRILE OR ZYMOTIC
DISEASES: 1888-1895, INCLUSIVE.**

| CAUSES OF DEATH. | 1895 | 1894 | 1893 | 1892 | 1891 | 1890 | 1889 | 1888 |
|----------------------------|------|------|-------|-------|-------|-------|-------|-------|
| Cholera infantum | 1257 | 2332 | 1623 | 1211 | 1122 | 1058 | 1052 | 874 |
| <i>morbus</i> | 88 | 53 | 55 | 53 | 53 | 58 | 64 | 47 |
| Diarrhea, infantile | 119 | 449 | ..... | ..... | ..... | ..... | ..... | ..... |
| Diarrhea | 110 | 40 | 145 | 223 | 375 | 245 | 167 | 148 |
| Dysentery | 64 | 64 | 456 | 380 | 445 | 356 | 331 | 293 |
| Erysipelas | 91 | 72 | 91 | 94 | 99 | 75 | 58 | 86 |
| Cerebro-spinal fever | 8 | 249 | 388 | 223 | 301 | 142 | 110 | 138 |
| Scarlet fever | 77 | 190 | 329 | 382 | 499 | 193 | 185 | 184 |
| Typhoid fever | 518 | 492 | 670 | 1489 | 1997 | 1008 | 453 | 375 |
| Measles | 156 | 182 | 234 | 185 | 265 | 67 | 204 | 151 |
| Smallpox | 157 | 1033 | 2 | ..... | ..... | ..... | 2 | ..... |
| Diphtheria | 1420 | 1406 | 1467 | 1548 | 1358 | 1261 | 1509 | 1297 |
| Total | 4065 | 6562 | 5481 | 5790 | 6514 | 4463 | 3135 | 3593 |

XIX. DEATHS AND DEATH RATES FROM ALL CAUSES AND FROM FEBRILE OR ZYMOTIC DISEASES;
DEATH RATES OF CHILDREN AND INFANTS: 1883-1895, INCLUSIVE.

| YEARS. | Population. | Number of deaths. | Deaths from zymotic diseases. | Deaths per 1000 of population of zymotic diseases. | Per cent. of total mortality of zymotic diseases. | Deaths under 5 years of age. | Deaths per 1000 of population of children under 5 years of age. | Per cent. of mortality of children under 5 years of age. | Deaths of children under 1 year of age. | Deaths per 1000 of population of children under 1 year of age. | Per cent. of total mortality of children under 1 year of age. |
|-----------|-------------|-------------------|-------------------------------|--|---|------------------------------|---|--|---|--|---|
| 1895..... | 1 600 000 | 24219 | 2683 | 1.68 | 11.08 | 10452 | 6.53 | 43.17 | 6817 | 4.26 | 28.17 |
| 1894..... | 1 567 727 | 23892 | 3286 | 2.09 | 13.75 | 11016 | 7.03 | 46.09 | 7386 | 4.68 | 30.69 |
| 1893..... | 1 600 000 | 27083 | 5993 | 3.74 | 22.12 | 12363 | 7.72 | 45.64 | 8125 | 5.07 | 30.00 |
| 1892..... | 1 428 000 | 26219 | 6275 | 4.36 | 23.89 | 11662 | 8.11 | 44.48 | 7574 | 5.29 | 28.66 |
| 1891..... | 1 250 000 | 27754 | 7012 | 5.61 | 25.26 | 12801 | 10.24 | 46.13 | 8208 | 6.56 | 29.57 |
| 1890..... | 1 200 000 | 21869 | 4908 | 4.49 | 22.44 | 9954 | 8.29 | 45.97 | 6630 | 5.53 | 30.32 |
| 1889..... | 965 000 | 16946 | 4441 | 4.60 | 26.32 | 8204 | 8.41 | 48.42 | 5008 | 5.07 | 28.88 |
| 1888..... | 830 000 | 15772 | 3952 | 4.76 | 24.92 | 7533 | 9.08 | 47.74 | 4718 | 5.66 | 29.90 |
| 1887..... | 760 000 | 15409 | 4164 | 5.48 | 28.89 | 7568 | 9.96 | 49.44 | 4483 | 5.90 | 39.09 |
| 1886..... | 704 000 | 13699 | 3437 | 4.88 | 25.09 | 6763 | 9.61 | 49.37 | 4081 | 5.80 | 29.87 |
| 1885..... | 665 000 | 12474 | 3210 | 4.83 | 25.73 | 6167 | 9.32 | 49.61 | 4000 | 6.02 | 32.06 |
| 1884..... | 630 000 | 12471 | 3506 | 5.56 | 28.11 | 6666 | 10.58 | 53.45 | 4179 | 6.63 | 33.52 |
| 1883..... | 580 000 | 11555 | 3053 | 5.26 | 26.42 | 5875 | 10.13 | 50.84 | 3850 | 6.64 | 33.22 |

| WARD. | 1895. | | | 1894. | | | 1893. | | | ZYMOTICS. | | | | | | TYPHOID. | | | | | |
|---------------------------|------------------|------------------|--------|------------------|--------|------------------|--------|------------------|--------|-----------|--------|-------|--------|-------|--------|----------|--------|-------|--------|-------|--------|
| | Popula- tion. | Total deaths. | Ratio. | Total deaths. | Ratio. | Total deaths. | Ratio. | Total deaths. | Ratio. | 1895. | | 1894. | | 1893. | | 1895. | | 1894. | | 1893. | |
| | | | | | | | | | | No. | Ratio. | No. | Ratio. | No. | Ratio. | No. | Ratio. | No. | Ratio. | No. | Ratio. |
| First | 24 836 | 435 | 17.50 | 199 | 5.60 | 278 | 5.13 | 15 | 0.60 | 21 | 0.59 | 43 | 0.79 | 6 | 0.24 | 3 | 0.08 | 5 | 0.09 | | |
| Second | 29 937 | 340 | 11.40 | 329 | 9.70 | 449 | 11.56 | 22 | 0.73 | 35 | 1.00 | 84 | 2.16 | 3 | 0.10 | 8 | 0.24 | 12 | 0.31 | | |
| Third | 36 063 | 410 | 11.39 | 350 | 8.77 | 466 | 12.60 | 19 | 0.52 | 39 | 0.75 | 86 | 2.41 | 3 | 0.08 | 7 | 0.17 | 8 | 0.21 | | |
| Fourth | 41 225 | 390 | 9.46 | 338 | 8.01 | 433 | 11.21 | 40 | 0.97 | 35 | 0.83 | 94 | 2.43 | 9 | 0.22 | 6 | 0.16 | 13 | 0.34 | | |
| Fifth | 51 974 | 659 | 12.70 | 673 | 12.99 | 824 | 16.38 | 118 | 1.88 | 158 | 2.08 | 210 | 4.17 | 13 | 0.25 | 13 | 0.25 | 15 | 0.30 | | |
| Sixth | 62 742 | 1074 | 17.13 | 987 | 16.18 | 1122 | 19.23 | 118 | 1.88 | 158 | 2.08 | 210 | 4.17 | 25 | 0.39 | 20 | 0.33 | 40 | 0.69 | | |
| Seventh | 41 990 | 587 | 14.01 | 590 | 12.34 | 652 | 11.92 | 79 | 1.90 | 62 | 1.40 | 189 | 3.45 | 9 | 0.21 | 11 | 0.24 | 15 | 0.27 | | |
| Eighth | 41 736 | 619 | 14.84 | 647 | 15.40 | 639 | 14.41 | 67 | 1.60 | 103 | 2.45 | 182 | 4.10 | 11 | 0.26 | 6 | 0.14 | 14 | 0.32 | | |
| Ninth | 56 390 | 779 | 13.83 | 786 | 16.03 | 815 | 16.28 | 70 | 1.24 | 155 | 3.12 | 219 | 4.38 | 10 | 0.18 | 11 | 0.22 | 19 | 0.38 | | |
| Tenth | 79 063 | 1120 | 14.30 | 1160 | 16.08 | 1136 | 18.10 | 134 | 1.70 | 286 | 3.97 | 325 | 5.28 | 14 | 0.18 | 8 | 0.11 | 32 | 0.51 | | |
| Eleventh | 41 523 | 456 | 10.98 | 381 | 8.73 | 487 | 10.29 | 54 | 1.30 | 39 | 0.89 | 105 | 2.22 | 8 | 0.19 | 6 | 0.11 | 14 | 0.30 | | |
| Twelfth | 73 507 | 882 | 12.00 | 721 | 11.04 | 969 | 14.34 | 91 | 1.24 | 79 | 1.21 | 184 | 3.17 | 25 | 0.34 | 26 | 0.40 | 19 | 0.28 | | |
| Thirteenth | 51 053 | 677 | 13.26 | 540 | 11.18 | 704 | 14.88 | 86 | 1.69 | 65 | 1.35 | 150 | 3.17 | 14 | 0.27 | 16 | 0.33 | 23 | 0.49 | | |
| Fourteenth | 63 734 | 888 | 13.78 | 819 | 14.14 | 905 | 16.53 | 116 | 1.82 | 144 | 2.49 | 267 | 4.88 | 12 | 0.19 | 15 | 0.26 | 21 | 0.38 | | |
| Fifteenth | 71 762 | 942 | 13.14 | 857 | 12.62 | 1017 | 15.96 | 131 | 1.83 | 159 | 2.34 | 288 | 4.56 | 22 | 0.30 | 17 | 0.25 | 24 | 0.38 | | |
| Sixteenth | 66 334 | 1168 | 17.62 | 1090 | 16.34 | 1174 | 16.42 | 134 | 2.02 | 134 | 2.01 | 360 | 5.03 | 19 | 0.29 | 12 | 0.18 | 22 | 0.31 | | |
| Seventeenth | 25 135 | 401 | 15.98 | 356 | 11.98 | 431 | 12.33 | 40 | 1.59 | 48 | 1.61 | 110 | 3.15 | 7 | 0.24 | 7 | 0.23 | 6 | 0.17 | | |
| Eighteenth | 27 886 | 299 | 10.75 | 258 | 6.97 | 354 | 7.94 | 23 | 0.83 | 29 | 0.79 | 74 | 1.66 | 5 | 0.18 | 6 | 0.16 | 6 | 0.13 | | |
| Nineteenth | 48 280 | 831 | 17.24 | 805 | 15.00 | 923 | 15.34 | 97 | 2.01 | 91 | 1.69 | 224 | 3.72 | 17 | 0.35 | 8 | 0.15 | 12 | 0.20 | | |
| Twentieth | 32 592 | 383 | 11.78 | 330 | 9.04 | 387 | 11.49 | 38 | 1.11 | 66 | 1.81 | 122 | 3.62 | 12 | 0.37 | 6 | 0.16 | 9 | 0.27 | | |
| Twenty-first | 34 029 | 464 | 13.32 | 463 | 12.25 | 536 | 12.48 | 45 | 1.58 | 48 | 1.82 | 105 | 2.44 | 10 | 0.28 | 15 | 0.39 | 11 | 0.26 | | |
| Twenty-second | 36 497 | 431 | 11.84 | 416 | 10.39 | 541 | 12.25 | 57 | 1.58 | 64 | 1.81 | 96 | 2.18 | 10 | 0.28 | 5 | 0.12 | 7 | 0.16 | | |
| Twenty-third | 40 199 | 550 | 13.71 | 582 | 11.32 | 682 | 13.88 | 72 | 1.79 | 79 | 1.59 | 181 | 3.55 | 12 | 0.30 | 17 | 0.36 | 19 | 0.37 | | |
| Twenty-fourth | 36 157 | 276 | 7.64 | 240 | 5.94 | 351 | 7.80 | 28 | 0.78 | 25 | 0.62 | 63 | 1.40 | 7 | 0.19 | 5 | 0.12 | 7 | 0.15 | | |
| Twenty-fifth | 44 674 | 706 | 9.06 | 388 | 10.87 | 498 | 12.70 | 58 | 1.30 | 72 | 2.01 | 109 | 3.23 | 11 | 0.24 | 14 | 0.39 | 13 | 0.39 | | |
| Twenty-sixth | 57 815 | 706 | 12.21 | 609 | 12.87 | 709 | 17.33 | 97 | 1.69 | 102 | 2.30 | 215 | 5.26 | 10 | 0.17 | 12 | 0.25 | 21 | 0.51 | | |
| Twenty-seventh | 25 164 | 268 | 10.68 | 279 | 14.23 | 252 | 14.81 | 32 | 1.27 | 47 | 2.40 | 86 | 5.25 | 7 | 0.28 | 12 | 0.61 | 7 | 0.43 | | |
| Twenty-eighth | 22 701 | 300 | 13.21 | 234 | 12.85 | 237 | 16.87 | 28 | 1.23 | 37 | 2.63 | 70 | 4.98 | 3 | 0.13 | 4 | 0.22 | 2 | 0.14 | | |
| Twenty-ninth | 39 334 | 582 | 14.81 | 585 | 14.87 | 716 | 16.86 | 63 | 1.60 | 88 | 2.14 | 206 | 4.85 | 16 | 0.40 | 14 | 0.34 | 17 | 0.40 | | |
| Thirtieth | 93 154 | 1219 | 13.09 | 1197 | 14.15 | 1406 | 20.33 | 128 | 1.37 | 205 | 2.42 | 428 | 6.19 | 19 | 0.20 | 25 | 0.29 | 28 | 0.40 | | |
| Thirty-first | 44 391 | 568 | 12.82 | 509 | 12.99 | 627 | 16.33 | 72 | 1.62 | 70 | 1.73 | 190 | 4.97 | 10 | 0.22 | 12 | 0.30 | 14 | 0.36 | | |
| Thirty-second | 54 134 | 540 | 9.98 | 437 | 9.10 | 531 | 12.52 | 50 | 1.86 | 48 | 1.05 | 121 | 2.84 | 12 | 0.22 | 9 | 0.19 | 13 | 0.30 | | |
| Thirty-third | 41 485 | 686 | 16.57 | 529 | 15.38 | 761 | 17.91 | 77 | 1.86 | 60 | 1.74 | 204 | 4.81 | 12 | 0.29 | 14 | 0.40 | 20 | 0.47 | | |
| Thirty-fourth | 65 508 | 821 | 12.53 | 704 | 12.28 | 694 | 13.70 | 133 | 2.03 | 139 | 2.46 | 211 | 4.14 | 17 | 0.26 | 17 | 0.31 | 20 | 0.39 | | |
| Public Institutions | | 3064 | | 2853 | | 2447 | | 300 | | 905 | | 337 | | 119 | | 105 | | 142 | | | |
| Violence | | | | 1653 | | 1971 | | | | | | | | | | | | | | | |
| Total | 1 600 000 | 24 219 | 15.14 | 23 892 | 15.24 | 27 083 | 16.93 | 2683 | 1.68 | 3850 | 2.45 | 6303 | 3.94 | 518 | 0.32 | 492 | 0.31 | 670 | 0.42 | | |

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Vital Statistics of Chicago,

FOR THE YEAR ENDED DECEMBER 31, 1896.

| | |
|--|------------------------------|
| Population of Chicago, Official School Census, July 1, 1896..... | 1 619 226 |
| Total Deaths from All Causes..... | 23 257 |
| Annual Death Rate..... | 14.36 per 1000 of Population |

POPULATION BY AGES AND SEXES.

| AGES. | Males. | Females. | Total. |
|-------------------------------|---------|----------|-----------|
| Under 1 year | 21 512 | 21 391 | 42 903 |
| Between 1-2 years | 17 511 | 17 096 | 34 607 |
| 2-3 | 18 325 | 17 892 | 36 217 |
| 3-4 | 19 553 | 19 090 | 38 643 |
| 4-5 | 19 962 | 20 121 | 40 083 |
| 5-10 | 89 370 | 88 304 | 177 674 |
| 10-20 | 143 826 | 144 362 | 288 188 |
| 20-30 | 163 341 | 157 295 | 320 636 |
| 30-40 | 119 895 | 112 474 | 232 369 |
| 40-50 | 83 709 | 77 008 | 160 717 |
| 50-60 | 56 928 | 51 461 | 108 389 |
| 60-70 | 38 179 | 34 362 | 72 541 |
| 70-80 | 18 665 | 17 605 | 36 270 |
| Over 80 years..... | 7 328 | 6 439 | 13 767 |
| Unstated ages and sexes | | | 16 222 |
| Total all ages..... | 818 104 | 784 900 | 1 619 226 |

BY GROUPED AGES AND SEXES.

| GROUPS. | Males. | Females. | Total. |
|-------------------------------|---------|----------|---------|
| Under 4 years | 76 901 | 75 469 | 152 370 |
| 5 | 96 863 | 95 590 | 192 453 |
| 6 | 122 256 | 121 059 | 243 315 |
| 14 | 246 986 | 244 036 | 491 022 |
| 21 | 349 097 | 345 815 | 694 912 |
| Over 21 | 469 007 | 439 085 | 908 092 |
| Unstated ages and sexes | | | 16 222 |

I. DEATHS AND REPORTED CAUSES OF DEATHS: 1896.

| CAUSES OF DEATH. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|---|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| Total Deaths from All Causes | 2013 | 1988 | 1988 | 2086 | 1804 | 1895 | 2457 | 2261 | 1658 | 1726 | 1568 | 1813 | 23257 |
| Disease | 1911 | 1883 | 1897 | 1962 | 1686 | 1763 | 2335 | 2114 | 1562 | 1611 | 1458 | 1711 | 21895 |
| Violence | 102 | 105 | 91 | 124 | 118 | 132 | 122 | 145 | 96 | 115 | 110 | 102 | 1362 |
| GENERAL DISEASES: | | | | | | | | | | | | | |
| <i>Febrile or Zymotic—</i> | | | | | | | | | | | | | |
| Cerebro-spinal fever | ... | ... | 1 | ... | 1 | ... | ... | ... | ... | ... | ... | ... | 2 |
| Diphtheria | 118 | 92 | 75 | 74 | 49 | 50 | 54 | 50 | 93 | 116 | 87 | 98 | 956 |
| Influenza | 1 | 8 | 3 | 1 | ... | ... | ... | ... | ... | 1 | ... | 3 | 17 |
| Malarial fevers | 6 | 3 | 5 | 2 | 2 | 2 | 3 | 3 | 2 | 1 | 2 | 1 | 32 |
| Measles | 8 | 6 | 4 | 4 | 8 | 7 | 13 | 6 | 2 | 6 | 3 | 6 | 73 |
| Mumps | 1 | 1 | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | 3 |
| Scarlet fever | 8 | 3 | 5 | 2 | 5 | 2 | 5 | 3 | 5 | 4 | 5 | 7 | 54 |
| Smallpox | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Typhoid fever | 87 | 89 | 65 | 33 | 31 | 44 | 58 | 64 | 87 | 89 | 60 | 44 | 751 |
| Varicella | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | 1 |
| Whooping cough | 8 | 5 | 5 | 13 | 22 | 17 | 28 | 24 | 28 | 16 | 10 | 11 | 187 |
| Total | 237 | 207 | 163 | 129 | 118 | 122 | 161 | 151 | 218 | 233 | 167 | 170 | 2076 |
| <i>Diarrheal—</i> | | | | | | | | | | | | | |
| Cholera infantum | ... | ... | ... | ... | ... | 177 | 469 | 322 | 107 | ... | ... | ... | 1075 |
| morbis | 1 | ... | ... | 2 | 2 | 3 | 16 | 17 | 1 | 1 | ... | 1 | 44 |
| Diarrhea | 11 | 3 | 5 | 2 | 4 | 28 | 44 | 20 | 20 | 6 | 4 | 3 | 150 |
| infantile | 22 | 6 | 7 | 10 | 36 | ... | ... | ... | ... | 29 | 13 | 4 | 127 |
| Dysentery | 7 | 4 | 5 | 6 | 6 | 6 | 10 | 14 | 10 | ... | ... | 1 | 69 |
| Total | 41 | 13 | 17 | 20 | 48 | 214 | 539 | 373 | 138 | 36 | 17 | 9 | 1465 |
| <i>Zoogenous—</i> | | | | | | | | | | | | | |
| Hydrophobia | ... | ... | ... | ... | 1 | ... | 2 | ... | ... | ... | 2 | ... | 5 |
| Vaccination | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| Total | ... | ... | ... | ... | 1 | ... | 2 | ... | ... | ... | 2 | ... | 5 |
| <i>Venereal—</i> | | | | | | | | | | | | | |
| Syphilis, acquired | 2 | ... | ... | ... | ... | 1 | 3 | 1 | 2 | 4 | 2 | 1 | 16 |
| congenital | 8 | 3 | 4 | 2 | 7 | 2 | 2 | 4 | 2 | 6 | 4 | 6 | 50 |
| Total | 10 | 3 | 4 | 2 | 7 | 3 | 5 | 5 | 4 | 10 | 6 | 7 | 66 |
| <i>Septic—</i> | | | | | | | | | | | | | |
| Erysipelas | 7 | 9 | 10 | 10 | 9 | 4 | 2 | 1 | 6 | 4 | 3 | 8 | 73 |
| Puerperal septicemia | 15 | 19 | 15 | 23 | 13 | 10 | 8 | 15 | 8 | 5 | 8 | 7 | 146 |
| Pyæmia | 3 | 1 | 1 | 4 | 2 | 3 | 4 | ... | 3 | 1 | 2 | 4 | 28 |
| Septicæmia | 6 | 9 | 10 | 8 | 4 | 9 | 10 | 9 | 7 | 10 | 3 | 7 | 92 |
| Total | 31 | 38 | 36 | 45 | 28 | 26 | 24 | 25 | 24 | 20 | 16 | 26 | 339 |
| <i>Parasitic Diseases—</i> | | | | | | | | | | | | | |
| Thrush | 2 | 2 | 3 | ... | ... | 1 | 4 | 3 | ... | ... | 1 | 2 | 18 |
| Trichinosis | ... | ... | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | 1 |
| Total | 2 | 2 | 3 | ... | ... | 1 | 4 | 3 | 1 | ... | 1 | 2 | 19 |
| <i>Dietetic Diseases—</i> | | | | | | | | | | | | | |
| Alcoholism | 6 | 8 | 7 | 9 | 6 | 5 | 7 | 9 | 5 | 5 | 6 | 4 | 77 |
| Scurvy | ... | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 1 | ... | 2 |
| Total | 6 | 8 | 7 | 10 | 6 | 5 | 7 | 9 | 5 | 5 | 7 | 4 | 79 |

DEATHS AND REPORTED CAUSES OF DEATHS: 1896—Continued.

| CAUSES OF DEATH. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|--|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| <i>Constitutional Diseases—</i> | | | | | | | | | | | | | |
| Anemia | 6 | 6 | 6 | 5 | 2 | 3 | 3 | 7 | 2 | 2 | 2 | 4 | 54 |
| Cancer of breast | 1 | 5 | 3 | 1 | 6 | 7 | 6 | 3 | 2 | 3 | 1 | 8 | 46 |
| liver | 5 | 1 | 7 | 8 | 9 | 10 | 6 | 9 | 8 | 7 | 7 | 8 | 85 |
| rectum | 3 | 2 | 4 | 5 | 2 | 2 | 3 | 3 | 4 | 1 | 1 | 1 | 29 |
| stomach | 18 | 16 | 14 | 18 | 15 | 18 | 21 | 21 | 8 | 16 | 13 | 18 | 196 |
| womb | 10 | 6 | 8 | 4 | 8 | 10 | 7 | 12 | 5 | 8 | 8 | 9 | 95 |
| other parts | 22 | 21 | 19 | 23 | 23 | 21 | 35 | 26 | 18 | 31 | 22 | 22 | 283 |
| Diabetes | 7 | 8 | 9 | 7 | 4 | 7 | 11 | 8 | 5 | 7 | 6 | 11 | 90 |
| Hemorrhagic diathesis | 2 | 1 | 3 | 1 | 3 | 5 | 1 | 1 | 2 | 1 | 7 | 6 | 30 |
| Leucocythemia | 2 | 1 | 2 | 2 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 3 | 20 |
| Rheumatism | 10 | 11 | 18 | 15 | 6 | 4 | 7 | 5 | 3 | 11 | 5 | 6 | 101 |
| Rickets | 2 | 1 | 1 | 4 | 1 | 3 | 2 | 3 | 5 | 1 | 1 | 1 | 23 |
| Tuberculosis, articular | 4 | 3 | 3 | 1 | 2 | 1 | 2 | 1 | 1 | 3 | 2 | 1 | 22 |
| cerebral | 13 | 10 | 17 | 15 | 11 | 12 | 12 | 9 | 6 | 8 | 10 | 12 | 135 |
| glandular | 4 | 1 | 1 | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 3 | 4 | 20 |
| hemoptysic | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 9 |
| mesenteric | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 1 | 1 | 2 | 16 |
| pulmonary | 196 | 215 | 235 | 205 | 231 | 190 | 184 | 194 | 174 | 145 | 174 | 167 | 2310 |
| other forms | 14 | 10 | 20 | 18 | 17 | 14 | 8 | 18 | 9 | 10 | 4 | 13 | 155 |
| Total | 320 | 320 | 370 | 335 | 344 | 311 | 312 | 324 | 263 | 259 | 266 | 295 | 3719 |
| <i>Developmental—</i> | | | | | | | | | | | | | |
| Atelectasis | 1 | 1 | 2 | 4 | 4 | 3 | 2 | 3 | 4 | 4 | 2 | 2 | 31 |
| Cyanosis | 3 | 4 | 2 | 1 | 2 | 2 | 1 | 3 | 3 | 1 | 1 | 3 | 25 |
| Marasmus, infantile | 80 | 49 | 60 | 52 | 57 | 56 | 82 | 79 | 70 | 45 | 42 | 50 | 722 |
| senile | 9 | 8 | 7 | 10 | 12 | 5 | 2 | 7 | 7 | 8 | 3 | 7 | 85 |
| Old age | 37 | 32 | 29 | 20 | 24 | 20 | 29 | 24 | 26 | 26 | 25 | 29 | 321 |
| Premature births | 18 | 14 | 14 | 25 | 24 | 15 | 25 | 23 | 14 | 21 | 16 | 15 | 224 |
| Spina bifida | 2 | 1 | 2 | 1 | 1 | 3 | 1 | 3 | 1 | 1 | 1 | 2 | 15 |
| Trismus nascentium | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 3 | 7 | 15 |
| Other congenital defects and accidents | 5 | 12 | 11 | 11 | 11 | 5 | 15 | 11 | 8 | 12 | 8 | 5 | 114 |
| Total | 156 | 119 | 127 | 123 | 138 | 109 | 157 | 153 | 134 | 117 | 99 | 120 | 1552 |
| LOCAL DISEASES: | | | | | | | | | | | | | |
| <i>Nervous Diseases—</i> | | | | | | | | | | | | | |
| Apoplexy | 40 | 36 | 44 | 40 | 32 | 44 | 34 | 32 | 34 | 42 | 39 | 54 | 471 |
| Brain, abscess of | 3 | 2 | 4 | 3 | 2 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 25 |
| compression of | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 5 |
| concussion of | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 5 |
| congestion of | 7 | 4 | 6 | 8 | 2 | 10 | 7 | 9 | 3 | 5 | 5 | 11 | 77 |
| softening of | 10 | 3 | 1 | 4 | 3 | 3 | 6 | 8 | 2 | 2 | 6 | 4 | 52 |
| tumor of | 2 | 4 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 18 |
| other diseases of | 1 | 6 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 1 | 1 | 16 |
| Brain and membranes, inflam- | | | | | | | | | | | | | |
| mation of | 52 | 52 | 52 | 50 | 47 | 59 | 57 | 45 | 30 | 20 | 37 | 30 | 531 |
| Convulsions | 98 | 86 | 80 | 91 | 82 | 66 | 86 | 80 | 56 | 72 | 70 | 72 | 939 |
| Dementia | 1 | 1 | 3 | 8 | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 1 | 8 |
| Epilepsy | 2 | 2 | 3 | 3 | 7 | 6 | 7 | 9 | 1 | 1 | 1 | 1 | 41 |
| Hydrocephalus | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 43 |
| Laryngismus stridulus | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 9 |
| Locomotor ataxia | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 1 | 1 | 15 |
| Mania | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 7 |
| Melancholia | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Paralysis | 27 | 18 | 17 | 20 | 15 | 22 | 18 | 13 | 13 | 21 | 10 | 16 | 210 |
| Spinal cord and membranes, | | | | | | | | | | | | | |
| diseases of | 33 | 19 | 32 | 29 | 23 | 36 | 33 | 13 | 27 | 9 | 14 | 28 | 296 |
| Sunstroke | 1 | 1 | 1 | 1 | 3 | 2 | 8 | 172 | 1 | 1 | 1 | 1 | 185 |
| Tetanus | 1 | 1 | 1 | 2 | 5 | 5 | 8 | 3 | 2 | 6 | 4 | 3 | 39 |
| Nervous system, other dis- | | | | | | | | | | | | | |
| eases of | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 3 | 3 | 1 | 1 | 1 | 25 |
| Total | 281 | 238 | 252 | 266 | 235 | 268 | 283 | 399 | 182 | 192 | 194 | 228 | 3018 |

DEATHS AND REPORTED CAUSES OF DEATHS: 1896—Continued.

| CAUSES OF DEATH. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|--|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| <i>Circulatory System—</i> | | | | | | | | | | | | | |
| Angina pectoris..... | 9 | 5 | 4 | 6 | 8 | 5 | 3 | 4 | 2 | 7 | 1 | 4 | 58 |
| Aneurism of aorta..... | 4 | 3 | 2 | 2 | 4 | 4 | 2 | 2 | 1 | 6 | 5 | 1 | 34 |
| of other arteries.... | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 1 | 10 |
| Arteries, other diseases of... | 3 | 7 | 1 | 4 | 5 | 1 | 1 | 4 | 1 | 1 | 8 | 3 | 39 |
| Endocarditis..... | 11 | 10 | 14 | 16 | 13 | 12 | 4 | 5 | 10 | 11 | 8 | 9 | 123 |
| Heart, fatty..... | 6 | 5 | 14 | 2 | 5 | 4 | 11 | 7 | 8 | 5 | 10 | 11 | 88 |
| valve-disease of..... | 37 | 51 | 37 | 38 | 35 | 41 | 47 | 21 | 27 | 42 | 28 | 51 | 455 |
| other diseases of..... | 40 | 50 | 42 | 43 | 39 | 37 | 38 | 46 | 31 | 61 | 40 | 49 | 516 |
| Occlusion of artery..... | 3 | 2 | 5 | 3 | 1 | 1 | 1 | 3 | 5 | 4 | 5 | 3 | 33 |
| Pericarditis..... | 5 | 4 | 4 | 9 | 5 | 2 | 4 | 1 | 3 | 3 | 4 | 5 | 49 |
| Circulatory system, other diseases of..... | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 4 |
| Total..... | 120 | 135 | 126 | 124 | 116 | 107 | 113 | 94 | 88 | 139 | 108 | 139 | 1409 |
| <i>Respiratory System—</i> | | | | | | | | | | | | | |
| Asthma..... | 10 | 11 | 11 | 12 | 14 | 5 | 2 | 1 | 12 | 8 | 15 | 5 | 106 |
| Bronchitis..... | 87 | 125 | 152 | 190 | 124 | 66 | 49 | 42 | 52 | 79 | 81 | 118 | 1165 |
| Catarrhal croup..... | 7 | 24 | 17 | 11 | 10 | 7 | 8 | 3 | 13 | 16 | 9 | 17 | 142 |
| Empyema..... | 3 | 2 | 1 | 1 | 1 | 2 | 3 | 1 | 1 | 2 | 1 | 1 | 16 |
| Laryngitis..... | 6 | 9 | 3 | 2 | 1 | 1 | 1 | 3 | 3 | 3 | 5 | 7 | 44 |
| Oedema of glottis..... | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 8 |
| Pleurisy..... | 3 | 8 | 6 | 4 | 4 | 4 | 3 | 1 | 2 | 2 | 7 | 2 | 43 |
| Pneumonia..... | 232 | 267 | 260 | 315 | 168 | 111 | 95 | 59 | 78 | 128 | 165 | 263 | 2141 |
| Pulmonary congestion..... | 12 | 15 | 11 | 16 | 8 | 4 | 7 | 7 | 4 | 5 | 14 | 18 | 121 |
| Respiratory sys., other dis. of. | 8 | 7 | 10 | 11 | 14 | 9 | 6 | 8 | 5 | 12 | 8 | 6 | 104 |
| Total..... | 369 | 469 | 471 | 562 | 344 | 209 | 174 | 124 | 170 | 256 | 306 | 436 | 3890 |
| <i>Digestive System—</i> | | | | | | | | | | | | | |
| Appendicitis..... | 10 | 13 | 14 | 13 | 10 | 19 | 10 | 14 | 12 | 12 | 15 | 16 | 158 |
| Gallstones..... | 2 | 1 | 3 | 1 | 3 | 3 | 2 | 3 | 1 | 1 | 2 | 2 | 20 |
| Gastric ulcer..... | 2 | 4 | 4 | 2 | 4 | 4 | 4 | 4 | 3 | 9 | 3 | 4 | 39 |
| Gastritis..... | 18 | 14 | 21 | 14 | 14 | 20 | 25 | 13 | 15 | 12 | 13 | 20 | 199 |
| Gastro-enteritis..... | 48 | 44 | 28 | 50 | 41 | 82 | 151 | 156 | 53 | 36 | 21 | 24 | 734 |
| Hernia..... | 4 | 2 | 2 | 7 | 3 | 2 | 1 | 4 | 6 | 7 | 7 | 5 | 50 |
| Intestines, inflammation of..... | 53 | 33 | 23 | 47 | 41 | 85 | 154 | 78 | 61 | 53 | 34 | 37 | 704 |
| obstruction of..... | 11 | 11 | 8 | 12 | 4 | 13 | 8 | 12 | 13 | 14 | 9 | 8 | 123 |
| other diseases of..... | 3 | 6 | 2 | 2 | 2 | 5 | 7 | 3 | 2 | 4 | 2 | 2 | 40 |
| Liver, abscess of..... | 1 | 1 | 3 | 2 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 16 |
| cirrhosis of..... | 11 | 14 | 14 | 12 | 21 | 7 | 22 | 18 | 17 | 21 | 9 | 16 | 182 |
| inflammation of..... | 5 | 5 | 6 | 4 | 4 | 3 | 6 | 3 | 3 | 4 | 5 | 3 | 51 |
| other diseases of..... | 8 | 13 | 7 | 15 | 13 | 6 | 10 | 10 | 10 | 8 | 5 | 1 | 106 |
| Peritonitis..... | 23 | 16 | 23 | 18 | 21 | 10 | 23 | 15 | 11 | 18 | 21 | 12 | 211 |
| Other diseases of digestive system..... | 11 | 5 | 10 | 6 | 4 | 14 | 8 | 16 | 10 | 15 | 6 | 4 | 109 |
| Total..... | 210 | 182 | 173 | 205 | 182 | 273 | 428 | 351 | 218 | 214 | 151 | 155 | 2742 |
| <i>Absorbent and Glandular System—</i> | | | | | | | | | | | | | |
| Addison's disease..... | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 13 |
| Bronchocele..... | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 13 |
| Lymphatics, diseases of..... | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 13 |
| Total..... | 2 | 1 | 2 | 1 | 3 | 1 | 1 | 1 | 1 | 5 | 1 | 1 | 17 |
| <i>Urinary System—</i> | | | | | | | | | | | | | |
| Calculus, renal..... | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 4 |
| vesical..... | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 5 |
| Cystitis..... | 8 | 3 | 3 | 2 | 3 | 4 | 1 | 5 | 5 | 1 | 2 | 2 | 38 |
| Nephritis, acute..... | 15 | 15 | 16 | 18 | 11 | 19 | 8 | 9 | 8 | 18 | 8 | 17 | 162 |
| chronic..... | 49 | 62 | 56 | 47 | 44 | 59 | 44 | 51 | 55 | 58 | 62 | 65 | 656 |
| Uremia..... | 10 | 15 | 5 | 6 | 6 | 7 | 10 | 9 | 6 | 15 | 11 | 10 | 110 |
| Other diseases, urinary organs | 4 | 4 | 1 | 2 | 2 | 6 | 3 | 4 | 3 | 3 | 9 | 4 | 45 |
| Total..... | 87 | 106 | 87 | 86 | 69 | 80 | 83 | 71 | 74 | 93 | 89 | 95 | 1020 |

DEATHS AND REPORTED CAUSES OF DEATHS: 1896—*Concluded.*

| CAUSES OF DEATH. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|---|----------|-----------|--------|--------|-------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| <i>Reproductive System—</i> | | | | | | | | | | | | | |
| Abortion, miscarriage | 4 | 1 | 4 | 9 | 1 | 2 | 2 | 1 | 3 | 1 | ..... | ..... | 28 |
| Childbirth | 1 | 2 | 2 | 1 | 1 | 2 | 3 | 2 | 1 | ..... | 3 | ..... | 18 |
| Diseases of uterus | 2 | 5 | 7 | 9 | ..... | 4 | 5 | 3 | 3 | 4 | 4 | 3 | 49 |
| ovaries and other appendages | 2 | 5 | 6 | 1 | 6 | 4 | 5 | 4 | 8 | 7 | 2 | 4 | 54 |
| Pelvic abscess ..... | ..... | 1 | 4 | 2 | 2 | 5 | 2 | 1 | 2 | 1 | 1 | 1 | 22 |
| peritonitis | 2 | 2 | 1 | 2 | 1 | ..... | 2 | 2 | ..... | ..... | ..... | ..... | 11 |
| Placenta praeria | 1 | 1 | ..... | 1 | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 4 |
| Puerperal convulsions | 2 | 2 | 3 | 2 | 1 | 3 | 5 | 2 | 4 | 3 | 2 | 2 | 31 |
| hemorrhage ..... | ..... | ..... | 4 | 1 | 1 | ..... | ..... | ..... | 1 | 2 | 3 | ..... | 12 |
| peritonitis | 1 | 5 | 2 | 9 | 2 | 2 | 2 | ..... | 3 | 1 | 1 | 2 | 30 |
| Pregnancy and parturition, other afflictions of | 4 | 2 | 2 | 3 | 10 | 2 | 2 | 4 | 4 | 3 | 3 | 1 | 40 |
| Total | 19 | 26 | 35 | 40 | 26 | 24 | 27 | 19 | 29 | 22 | 19 | 13 | 299 |
| <i>Osseous and Integumentary Systems—</i> | | | | | | | | | | | | | |
| Abscess | 3 | 5 | 8 | 1 | 10 | 5 | 5 | 3 | 6 | 4 | 5 | 3 | 58 |
| Carbuncle ..... | ..... | 1 | ..... | ..... | 2 | ..... | ..... | ..... | 1 | ..... | 1 | 1 | 6 |
| Caries and necrosis ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1 | ..... | ..... | ..... | ..... | ..... | 1 |
| Eczema ..... | ..... | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 2 |
| Senile gangrene ..... | ..... | 1 | 4 | 3 | 1 | 3 | ..... | 3 | 3 | 1 | 1 | 3 | 23 |
| Ulcer ..... | ..... | ..... | ..... | ..... | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1 |
| Osseous and integumentary, other diseases of | 17 | 8 | 12 | 10 | 7 | 3 | 9 | 8 | 3 | 5 | 3 | 4 | 89 |
| Total | 20 | 16 | 24 | 14 | 21 | 11 | 15 | 14 | 13 | 10 | 10 | 12 | 180 |
| DEATHS FROM VIOLENCE: | | | | | | | | | | | | | |
| <i>Misadventure or Negligence—</i> | | | | | | | | | | | | | |
| Asphyxiated | 1 | 4 | 2 | 3 | 5 | 1 | 2 | 3 | 4 | 3 | 1 | 8 | 37 |
| Burns and scalds | 13 | 10 | 15 | 6 | 7 | 4 | 6 | 8 | 6 | 14 | 11 | 5 | 105 |
| Drowning | 2 | 3 | 3 | 17 | 15 | 16 | 22 | 29 | 8 | 5 | 4 | 3 | 127 |
| Explosions ..... | ..... | ..... | 1 | ..... | ..... | 5 | ..... | 3 | ..... | ..... | ..... | ..... | 9 |
| Exposure | 2 | 1 | 1 | ..... | 1 | 2 | ..... | 2 | ..... | ..... | ..... | ..... | 10 |
| Falls | 10 | 6 | 13 | 12 | 12 | 17 | 12 | 16 | 14 | 9 | 10 | 15 | 146 |
| Firearms | 2 | 2 | 3 | 1 | 3 | 2 | 8 | 6 | 2 | 7 | 6 | 9 | 51 |
| Killed by electricity or machinery | 1 | 1 | ..... | ..... | 4 | 3 | ..... | 4 | ..... | 2 | ..... | 2 | 17 |
| elevators | 4 | 1 | 2 | ..... | ..... | 1 | ..... | ..... | 1 | ..... | ..... | ..... | 9 |
| railroads | 21 | 21 | 14 | 16 | 15 | 15 | 12 | 20 | 13 | 11 | 22 | 18 | 198 |
| street cars | 1 | 3 | 5 | 9 | 6 | 4 | 8 | 4 | 6 | 9 | 5 | 6 | 66 |
| Poisons | 3 | 2 | 3 | 6 | 4 | 4 | 14 | 2 | 6 | 4 | 4 | 5 | 56 |
| Run over by other than railroads or street cars | 2 | 2 | 3 | 7 | ..... | 3 | 5 | 4 | 1 | 3 | 2 | 2 | 34 |
| Misadventure or negligence, other forms | 5 | 7 | 5 | 8 | 13 | 8 | 3 | 11 | 12 | 7 | 10 | 4 | 93 |
| Total | 67 | 63 | 70 | 85 | 85 | 85 | 92 | 112 | 73 | 74 | 75 | 77 | 958 |
| <i>Homicide—</i> | | | | | | | | | | | | | |
| Manslaughter | 6 | 11 | 2 | 6 | 9 | 7 | 4 | 5 | 4 | 6 | 5 | 4 | 69 |
| Total | 6 | 11 | 2 | 6 | 9 | 7 | 4 | 5 | 4 | 6 | 5 | 4 | 69 |
| <i>Suicide—</i> | | | | | | | | | | | | | |
| By cutting instrument | 1 | 4 | ..... | 3 | ..... | 3 | 1 | 2 | 1 | 2 | 1 | 1 | 19 |
| drowning ..... | ..... | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | ..... | 19 |
| firearms | 6 | 10 | 7 | 14 | 10 | 18 | 7 | 7 | 7 | 10 | 12 | 9 | 117 |
| hanging | 4 | 4 | 3 | 2 | 5 | 4 | 1 | 8 | 1 | 5 | 3 | 3 | 41 |
| poison | 11 | 9 | 6 | 10 | 6 | 11 | 13 | 10 | 7 | 10 | 12 | 8 | 113 |
| other modes | 6 | 3 | 2 | 2 | ..... | 1 | 2 | 1 | ..... | 5 | ..... | ..... | 22 |
| Total | 28 | 31 | 19 | 33 | 23 | 39 | 26 | 28 | 19 | 34 | 30 | 21 | 331 |
| Legal execution | 1 | ..... | ..... | ..... | 1 | 1 | ..... | ..... | ..... | 1 | ..... | ..... | 4 |
| Total | 1 | ..... | ..... | ..... | 1 | 1 | ..... | ..... | ..... | 1 | ..... | ..... | 4 |

II. AGES OF DECEDENTS AND DEATH RATES PER 1000 LIVING AT GIVEN AGES : 1896.

| AGE. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. | Death Rate per 1000. |
|------------------------|----------|-----------|--------|--------|-------|-------|-------|---------|------------|----------|-----------|-----------|--------|-------------------------|
| Under 5 years | 780 | 750 | 752 | 874 | 713 | 858 | 1357 | 1087 | 691 | 600 | 550 | 701 | 9713 | 50.48 |
| Under 1 year | 514 | 459 | 482 | 595 | 477 | 631 | 1014 | 757 | 411 | 390 | 341 | 441 | 6512 | 151.74 |
| From 1 to 2 years..... | 105 | 128 | 117 | 153 | 118 | 127 | 239 | 218 | 167 | 88 | 99 | 111 | 1670 | 48.27 |
| 2 to 3 | 79 | 69 | 76 | 52 | 62 | 48 | 51 | 57 | 54 | 45 | 49 | 68 | 710 | 19.60 |
| 3 to 4 | 48 | 57 | 41 | 44 | 34 | 36 | 33 | 33 | 31 | 50 | 33 | 48 | 488 | 12.90 |
| 4 to 5 | 34 | 37 | 36 | 30 | 22 | 16 | 20 | 22 | 28 | 27 | 28 | 33 | 333 | 8.30 |
| 5 to 10 | 78 | 65 | 53 | 73 | 47 | 62 | 65 | 65 | 62 | 80 | 62 | 86 | 798 | 4.49 |
| 10 to 20 | 96 | 107 | 98 | 70 | 95 | 77 | 90 | 87 | 88 | 80 | 83 | 66 | 1037 | 3.60 |
| 20 to 30 | 217 | 228 | 204 | 191 | 192 | 167 | 171 | 213 | 170 | 175 | 171 | 154 | 2253 | 7.04 |
| 30 to 40 | 194 | 240 | 236 | 245 | 192 | 187 | 203 | 219 | 168 | 191 | 157 | 172 | 2404 | 10.36 |
| 40 to 50 | 178 | 182 | 164 | 175 | 139 | 153 | 150 | 170 | 137 | 157 | 160 | 167 | 1932 | 12.07 |
| 50 to 60 | 143 | 136 | 165 | 153 | 144 | 147 | 150 | 158 | 119 | 153 | 128 | 160 | 1756 | 16.26 |
| 60 to 70 | 158 | 117 | 161 | 150 | 155 | 118 | 141 | 142 | 106 | 153 | 131 | 146 | 1678 | 23.30 |
| 70 to 80 | 107 | 115 | 109 | 109 | 89 | 85 | 89 | 86 | 77 | 95 | 78 | 112 | 1151 | 31.80 |
| 80 to 90 | 53 | 38 | 36 | 43 | 35 | 37 | 37 | 29 | 36 | 37 | 42 | 47 | 470 | } 39.05 |
| 90 to 100 | 7 | 10 | 9 | 3 | 3 | 4 | 4 | 5 | 4 | 4 | 6 | 1 | 60 | |
| 100 years and upwards. | 2 | ..... | 1 | ..... | ..... | ..... | ..... | ..... | ..... | 1 | ..... | 1 | 5 | |
| Total..... | 2013 | 1988 | 1988 | 2086 | 1804 | 1895 | 2457 | 2261 | 1658 | 1726 | 1568 | 1813 | 23257 | |

III. NATIVITY, SEX, SOCIAL RELATION AND COLOR OF DECEDENTS.

| NATIVITY. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|----------------------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| PLACE OF BIRTH. | | | | | | | | | | | | | |
| Chicago | 823 | 808 | 814 | 915 | 746 | 868 | 1338 | 1116 | 766 | 673 | 603 | 771 | 10241 |
| United States, except Chicago .. | 493 | 492 | 491 | 480 | 435 | 415 | 478 | 445 | 366 | 389 | 363 | 437 | 5284 |
| Germany | 234 | 258 | 231 | 239 | 200 | 224 | 229 | 236 | 153 | 217 | 219 | 218 | 2658 |
| Ireland | 151 | 149 | 124 | 156 | 121 | 100 | 121 | 157 | 110 | 140 | 133 | 142 | 1604 |
| Scandinavia | 96 | 92 | 109 | 77 | 85 | 87 | 87 | 83 | 81 | 82 | 65 | 66 | 1010 |
| Slavonia | 82 | 76 | 81 | 92 | 74 | 71 | 80 | 86 | 60 | 81 | 68 | 65 | 916 |
| Other foreign countries..... | 134 | 113 | 138 | 127 | 143 | 130 | 124 | 138 | 122 | 144 | 117 | 114 | 1544 |
| Total..... | 2013 | 1988 | 1988 | 2086 | 1804 | 1895 | 2457 | 2261 | 1658 | 1726 | 1568 | 1813 | 23257 |
| SEX. | | | | | | | | | | | | | |
| Males | 1074 | 1040 | 1058 | 1131 | 998 | 1027 | 1363 | 1244 | 881 | 905 | 867 | 967 | 12555 |
| Females | 939 | 948 | 930 | 955 | 806 | 868 | 1094 | 1017 | 777 | 821 | 701 | 846 | 10702 |
| Total..... | 2013 | 1988 | 1988 | 2086 | 1804 | 1895 | 2457 | 2261 | 1658 | 1726 | 1568 | 1813 | 23257 |
| SOCIAL RELATION. | | | | | | | | | | | | | |
| Single | 1184 | 1159 | 1161 | 1232 | 1084 | 1190 | 1721 | 1505 | 1006 | 940 | 877 | 1042 | 14101 |
| Married | 605 | 615 | 612 | 641 | 529 | 537 | 565 | 584 | 509 | 583 | 520 | 550 | 6850 |
| Widowed | 224 | 214 | 215 | 213 | 191 | 168 | 171 | 172 | 143 | 203 | 171 | 221 | 2306 |
| Total..... | 2013 | 1988 | 1988 | 2086 | 1804 | 1895 | 2457 | 2261 | 1658 | 1726 | 1568 | 1813 | 23257 |
| COLOR. | | | | | | | | | | | | | |
| White | 1965 | 1940 | 1926 | 2027 | 1751 | 1849 | 2412 | 2224 | 1620 | 1689 | 1544 | 1763 | 22710 |
| Colored | 48 | 48 | 62 | 59 | 53 | 46 | 45 | 37 | 38 | 37 | 24 | 50 | 547 |
| Total..... | 2013 | 1988 | 1988 | 2085 | 1804 | 1895 | 2457 | 2261 | 1658 | 1726 | 1568 | 1813 | 23257 |

IV. SUMMARY OF DEATHS FROM CLASSIFIED CAUSES OF DEATHS
BY MONTHS : 1896.

| CAUSES OF DEATH. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|---------------------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| GENERAL DISEASES: | | | | | | | | | | | | | |
| Febrile or Zymotic..... | 237 | 207 | 163 | 129 | 118 | 122 | 161 | 151 | 218 | 233 | 167 | 170 | 2076 |
| Diarrheal | 41 | 13 | 17 | 20 | 48 | 214 | 539 | 373 | 138 | 36 | 17 | 9 | 1465 |
| Septic | 31 | 38 | 36 | 45 | 28 | 26 | 24 | 25 | 24 | 20 | 16 | 26 | 339 |
| Cancerous | 59 | 51 | 55 | 59 | 63 | 68 | 78 | 73 | 45 | 66 | 51 | 66 | 734 |
| Tuberculous | 234 | 241 | 278 | 240 | 264 | 219 | 208 | 226 | 194 | 170 | 194 | 199 | 2667 |
| Developmental, infantile | 110 | 79 | 91 | 93 | 102 | 84 | 126 | 122 | 101 | 83 | 71 | 84 | 1146 |
| senile..... | 46 | 40 | 36 | 30 | 36 | 23 | 31 | 31 | 33 | 34 | 28 | 36 | 406 |
| Other general diseases..... | 45 | 41 | 51 | 48 | 31 | 33 | 44 | 42 | 34 | 38 | 37 | 43 | 487 |
| Total | 803 | 710 | 727 | 664 | 690 | 791 | 1211 | 1043 | 787 | 680 | 581 | 633 | 9320 |
| LOCAL DISEASES: | | | | | | | | | | | | | |
| Nervous system..... | 281 | 238 | 252 | 266 | 235 | 268 | 283 | 399 | 182 | 192 | 194 | 228 | 3018 |
| Circulatory system | 120 | 135 | 126 | 124 | 116 | 107 | 113 | 94 | 88 | 139 | 108 | 139 | 1409 |
| Respiratory system..... | 369 | 469 | 471 | 562 | 344 | 209 | 174 | 124 | 170 | 256 | 306 | 436 | 3890 |
| Digestive system | 210 | 182 | 173 | 205 | 182 | 273 | 428 | 351 | 218 | 214 | 151 | 155 | 2742 |
| Urinary system..... | 87 | 106 | 87 | 86 | 69 | 80 | 83 | 71 | 74 | 93 | 89 | 95 | 1020 |
| Reproductive system..... | 19 | 26 | 35 | 40 | 27 | 24 | 27 | 19 | 29 | 22 | 19 | 13 | 299 |
| Other local diseases | 22 | 17 | 26 | 15 | 24 | 11 | 16 | 15 | 14 | 15 | 10 | 12 | 197 |
| Total | 1108 | 1173 | 1170 | 1298 | 996 | 972 | 1124 | 1073 | 775 | 931 | 877 | 1078 | 12575 |
| VIOLENCE: | | | | | | | | | | | | | |
| Misadventure or negligence | 67 | 63 | 70 | 85 | 85 | 85 | 92 | 112 | 73 | 74 | 75 | 77 | 958 |
| Homicide | 6 | 11 | 2 | 6 | 9 | 7 | 4 | 5 | 4 | 6 | 5 | 4 | 69 |
| Suicide..... | 28 | 31 | 19 | 33 | 23 | 39 | 26 | 28 | 19 | 34 | 30 | 21 | 331 |
| Execution | 1 | ..... | ..... | ..... | 1 | 1 | ..... | ..... | ..... | 1 | ..... | ..... | 4 |
| Total | 102 | 105 | 91 | 124 | 118 | 132 | 122 | 145 | 96 | 115 | 110 | 102 | 1362 |
| Total all causes | 2013 | 1988 | 1988 | 2086 | 1804 | 1895 | 2457 | 2261 | 1658 | 1726 | 1568 | 1813 | 23257 |

V. TOTAL NUMBER OF DEATHS FROM THE TWENTY PRINCIPAL
CAUSES OF DEATHS BY MONTHS: 1896.

| CAUSES OF DEATH. | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|---------------------------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| Diarrheal diseases..... | 41 | 13 | 17 | 20 | 48 | 214 | 539 | 373 | 138 | 36 | 17 | 9 | 1465 |
| Tubercular diseases [<i>a</i>]..... | 234 | 241 | 278 | 240 | 264 | 219 | 208 | 226 | 194 | 170 | 194 | 199 | 2667 |
| Pneumonia..... | 232 | 257 | 260 | 315 | 168 | 111 | 95 | 59 | 78 | 128 | 165 | 263 | 2141 |
| Diphtheria..... | 118 | 92 | 75 | 74 | 49 | 50 | 54 | 50 | 93 | 116 | 87 | 98 | 956 |
| Brain diseases..... | 115 | 107 | 112 | 108 | 90 | 120 | 108 | 99 | 71 | 74 | 92 | 104 | 1200 |
| Convulsions..... | 98 | 86 | 80 | 91 | 82 | 66 | 86 | 80 | 56 | 72 | 70 | 72 | 939 |
| Bronchitis..... | 87 | 125 | 152 | 190 | 124 | 66 | 49 | 42 | 52 | 79 | 81 | 118 | 1165 |
| Heart diseases..... | 99 | 120 | 111 | 108 | 97 | 96 | 104 | 80 | 79 | 122 | 90 | 125 | 1231 |
| Infantile marasmus..... | 80 | 49 | 60 | 52 | 57 | 56 | 82 | 79 | 70 | 45 | 42 | 50 | 722 |
| Cancer..... | 59 | 51 | 55 | 59 | 63 | 68 | 78 | 73 | 45 | 66 | 51 | 66 | 734 |
| Typhoid fever..... | 87 | 89 | 65 | 33 | 31 | 44 | 58 | 64 | 87 | 89 | 60 | 44 | 751 |
| Nephritis, chronic..... | 49 | 69 | 62 | 56 | 47 | 44 | 59 | 44 | 51 | 55 | 58 | 62 | 656 |
| acute..... | 15 | 15 | 16 | 18 | 11 | 19 | 8 | 9 | 8 | 18 | 8 | 17 | 162 |
| Puerperal diseases..... | 23 | 29 | 26 | 39 | 28 | 17 | 17 | 21 | 20 | 14 | 17 | 12 | 263 |
| Cerebro-spinal fever..... | 33 | 19 | 32 | 29 | 23 | 36 | 33 | 13 | 27 | 9 | 14 | 28 | 296 |
| Septic diseases [<i>b</i>]..... | 16 | 19 | 21 | 22 | 15 | 16 | 16 | 10 | 16 | 15 | 8 | 19 | 193 |
| Whooping cough..... | 8 | 5 | 5 | 13 | 22 | 17 | 28 | 24 | 28 | 16 | 10 | 11 | 187 |
| Scarlet fever..... | 8 | 3 | 5 | 2 | 5 | 2 | 5 | 3 | 5 | 4 | 5 | 7 | 54 |
| Measles..... | 8 | 6 | 4 | 4 | 8 | 7 | 13 | 6 | 2 | 6 | 3 | 6 | 73 |
| Diseases of digestive system... | 210 | 182 | 173 | 205 | 182 | 273 | 428 | 351 | 218 | 214 | 151 | 155 | 2742 |
| Total..... | 1620 | 1587 | 1609 | 1678 | 1414 | 1541 | 2068 | 1706 | 1338 | 1348 | 1223 | 1465 | 18597 |

a] Including *Pulmonary Consumption*, 2310 deaths.

b] Exclusive of 146 deaths from *Puerperal septicemia*, which are included in *Puerperal diseases*.

VI. MORTALITY FROM ALL CAUSES, BY WARDS AND MONTHS: 1896.

| TOTAL DEATHS IN | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|---------------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| Ward First | 33 | 23 | 33 | 55 | 35 | 50 | 38 | 40 | 26 | 33 | 21 | 41 | 428 |
| Second. | 25 | 32 | 24 | 33 | 34 | 23 | 33 | 27 | 16 | 29 | 20 | 30 | 326 |
| Third. | 35 | 42 | 37 | 36 | 37 | 27 | 35 | 24 | 28 | 18 | 20 | 38 | 377 |
| Fourth. | 42 | 33 | 33 | 29 | 23 | 33 | 36 | 28 | 19 | 32 | 29 | 36 | 373 |
| Fifth. | 47 | 53 | 48 | 42 | 45 | 54 | 55 | 53 | 28 | 49 | 36 | 47 | 557 |
| Sixth. | 69 | 68 | 84 | 98 | 76 | 81 | 113 | 103 | 70 | 57 | 65 | 75 | 959 |
| Seventh. | 42 | 42 | 42 | 52 | 42 | 52 | 53 | 69 | 50 | 32 | 32 | 35 | 543 |
| Eighth. | 40 | 42 | 65 | 48 | 44 | 61 | 74 | 63 | 40 | 52 | 44 | 48 | 621 |
| Ninth. | 45 | 57 | 69 | 65 | 43 | 65 | 82 | 65 | 52 | 50 | 40 | 52 | 685 |
| Tenth. | 111 | 97 | 87 | 92 | 71 | 83 | 112 | 113 | 73 | 54 | 56 | 81 | 1030 |
| Eleventh. | 42 | 40 | 36 | 48 | 42 | 39 | 45 | 38 | 32 | 36 | 18 | 37 | 453 |
| Twelfth. | 98 | 88 | 88 | 94 | 93 | 93 | 77 | 92 | 75 | 81 | 85 | 67 | 1031 |
| Thirteenth. | 61 | 64 | 62 | 51 | 41 | 39 | 59 | 58 | 42 | 40 | 47 | 42 | 606 |
| Fourteenth. | 73 | 90 | 71 | 84 | 68 | 77 | 101 | 93 | 49 | 65 | 66 | 62 | 899 |
| Fifteenth. | 76 | 68 | 75 | 89 | 65 | 80 | 101 | 90 | 58 | 69 | 69 | 74 | 914 |
| Sixteenth. | 74 | 77 | 81 | 113 | 74 | 84 | 131 | 113 | 90 | 75 | 57 | 80 | 1049 |
| Seventeenth. | 35 | 25 | 30 | 34 | 27 | 32 | 44 | 23 | 23 | 21 | 29 | 14 | 337 |
| Eighteenth. | 23 | 16 | 16 | 22 | 15 | 18 | 22 | 22 | 19 | 19 | 18 | 16 | 226 |
| Nineteenth. | 65 | 62 | 68 | 56 | 57 | 60 | 84 | 102 | 59 | 71 | 55 | 65 | 804 |
| Twentieth. | 39 | 30 | 34 | 24 | 30 | 23 | 34 | 41 | 31 | 30 | 18 | 22 | 356 |
| Twenty-first. | 54 | 43 | 56 | 43 | 44 | 51 | 51 | 27 | 35 | 40 | 32 | 31 | 507 |
| Twenty-second. | 42 | 35 | 40 | 38 | 37 | 31 | 47 | 35 | 23 | 31 | 25 | 28 | 412 |
| Twenty-third. | 46 | 54 | 48 | 46 | 50 | 35 | 45 | 42 | 33 | 29 | 29 | 35 | 492 |
| Twenty-fourth. | 32 | 33 | 30 | 30 | 29 | 21 | 24 | 17 | 16 | 20 | 14 | 34 | 300 |
| Twenty-fifth. | 33 | 43 | 31 | 33 | 34 | 36 | 56 | 45 | 32 | 33 | 37 | 37 | 450 |
| Twenty-sixth. | 52 | 71 | 68 | 73 | 52 | 43 | 98 | 58 | 56 | 39 | 51 | 54 | 715 |
| Twenty-seventh. | 21 | 25 | 19 | 23 | 25 | 26 | 31 | 34 | 25 | 20 | 22 | 34 | 305 |
| Twenty-eighth. | 28 | 26 | 17 | 18 | 21 | 34 | 35 | 35 | 24 | 22 | 23 | 25 | 308 |
| Twenty-ninth. | 59 | 53 | 33 | 42 | 47 | 41 | 84 | 71 | 45 | 47 | 47 | 43 | 612 |
| Thirtieth. | 120 | 107 | 84 | 99 | 84 | 103 | 133 | 126 | 86 | 95 | 70 | 103 | 1210 |
| Thirty-first. | 58 | 45 | 40 | 56 | 47 | 36 | 60 | 57 | 36 | 43 | 31 | 46 | 555 |
| Thirty-second. | 47 | 48 | 61 | 54 | 42 | 48 | 37 | 36 | 41 | 36 | 57 | 44 | 551 |
| Thirty-third. | 55 | 50 | 51 | 53 | 52 | 56 | 80 | 81 | 56 | 54 | 55 | 52 | 695 |
| Thirty-fourth. | 59 | 49 | 67 | 53 | 53 | 51 | 67 | 86 | 58 | 50 | 51 | 63 | 707 |
| Public Institutions. | 232 | 257 | 260 | 260 | 225 | 209 | 280 | 254 | 212 | 254 | 199 | 222 | 2864 |
| Total. | 2013 | 1988 | 1988 | 2086 | 1804 | 1895 | 2457 | 2261 | 1658 | 1726 | 1568 | 1813 | 23257 |

VIII. DEATHS FROM FEBRILE OR ZYMOTIC DISEASES, BY WARDS
AND MONTHS : 1896.

| FEBRILE OR ZYMOTIC DEATHS IN | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|---------------------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| Ward First | | | 1 | | 1 | 2 | 1 | 1 | | 2 | | 1 | 9 |
| Second | 1 | | 2 | 2 | 5 | 2 | 3 | 1 | | | 2 | 2 | 20 |
| Third | 2 | 1 | 3 | 1 | 2 | 4 | 1 | 4 | 5 | 2 | 3 | 6 | 34 |
| Fourth | 3 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 1 | | 2 | 2 | 20 |
| Fifth | 3 | 5 | 1 | 2 | 1 | 1 | 3 | 2 | 2 | 3 | 4 | 3 | 30 |
| Sixth | 5 | 2 | 9 | 6 | 3 | 3 | 3 | 7 | 5 | 4 | 8 | 3 | 58 |
| Seventh | 3 | 2 | 5 | 6 | 4 | 3 | 6 | 7 | 7 | 10 | 5 | 7 | 65 |
| Eighth | 9 | 4 | 7 | 4 | 4 | 1 | 5 | 3 | 7 | 8 | 4 | 5 | 61 |
| Ninth | 7 | 4 | 3 | 1 | 4 | 5 | 4 | 6 | 8 | 9 | 2 | 7 | 60 |
| Tenth | 13 | 17 | 6 | 8 | 9 | 3 | 10 | 8 | 7 | 15 | 9 | 10 | 115 |
| Eleventh | 2 | 4 | 1 | 4 | 8 | 5 | | 2 | 3 | 9 | 2 | 5 | 45 |
| Twelfth | 15 | 7 | 5 | 8 | 4 | 4 | 4 | 4 | 8 | 5 | 6 | 4 | 74 |
| Thirteenth | 13 | 6 | 8 | 7 | 7 | 3 | 8 | 6 | 4 | 9 | 4 | 1 | 76 |
| Fourteenth | 10 | 18 | 6 | 4 | 5 | 10 | 10 | 5 | 7 | 7 | 9 | 6 | 97 |
| Fifteenth | 12 | 18 | 7 | 6 | 5 | 5 | 8 | 7 | 13 | 10 | 10 | 13 | 104 |
| Sixteenth | 10 | 18 | 8 | 6 | 4 | 3 | 5 | 3 | 6 | 7 | 2 | 4 | 76 |
| Seventeenth | 1 | 2 | | 2 | 2 | 3 | 6 | 1 | 3 | 6 | 1 | 2 | 29 |
| Eighteenth | 4 | | 2 | | 1 | 2 | 1 | 2 | 6 | 4 | 1 | 2 | 25 |
| Nineteenth | 7 | 2 | 2 | 5 | 5 | 8 | 10 | 3 | 15 | 9 | 9 | 6 | 81 |
| Twentieth | 3 | 5 | 3 | 1 | 3 | 3 | 1 | 5 | 2 | 2 | 4 | 2 | 34 |
| Twenty-first | 7 | 4 | 3 | | 5 | 3 | 4 | 4 | 3 | 6 | 3 | 1 | 43 |
| Twenty-second | 3 | 9 | 1 | 3 | 4 | 1 | 8 | 4 | 2 | 2 | | 2 | 39 |
| Twenty-third | 3 | 6 | 2 | 4 | 2 | 5 | 3 | 1 | 4 | 5 | 1 | 1 | 37 |
| Twenty-fourth | 5 | 7 | 2 | 4 | 2 | | | 2 | 1 | 1 | 1 | 2 | 27 |
| Twenty-fifth | 4 | 7 | 3 | 4 | 1 | 4 | 2 | 6 | 3 | 6 | 6 | 2 | 48 |
| Twenty-sixth | 7 | 8 | 6 | 5 | 4 | 4 | 6 | 6 | 11 | 8 | 11 | 6 | 82 |
| Twenty-seventh | 4 | 1 | | 1 | | | 2 | 3 | 4 | 3 | | 7 | 25 |
| Twenty-eighth | 2 | 3 | 4 | 4 | 1 | 3 | 2 | 3 | 4 | 3 | 3 | 5 | 38 |
| Twenty-ninth | 8 | 6 | 6 | 6 | 5 | | 6 | 4 | 8 | 7 | 5 | 7 | 66 |
| Thirtieth | 23 | 6 | 7 | 6 | 3 | 11 | 4 | 13 | 21 | 12 | 10 | 12 | 128 |
| Thirty-first | 12 | 7 | 6 | 3 | 1 | | 2 | 2 | 2 | 11 | 2 | 6 | 54 |
| Thirty-second | 4 | 2 | 6 | 2 | | | 2 | 3 | 3 | 2 | 3 | 5 | 32 |
| Thirty-third | 4 | 5 | 8 | 5 | 2 | 3 | 3 | 2 | 9 | 9 | 11 | 5 | 66 |
| Thirty-fourth | 6 | 3 | 12 | 2 | 2 | 6 | 5 | 8 | 8 | 7 | 7 | 5 | 71 |
| Public Institutions | 22 | 26 | 17 | 5 | 10 | 9 | 20 | 12 | 26 | 30 | 17 | 13 | 207 |
| Total | 237 | 207 | 163 | 129 | 118 | 122 | 161 | 151 | 218 | 233 | 167 | 170 | 2076 |

IX. DEATHS FROM CONSUMPTION, BY WARDS AND MONTHS: 1896.

| CONSUMPTION DEATHS IN | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|---------------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| Ward First | 8 | 1 | 5 | 7 | 10 | 1 | 3 | 3 | 3 | 4 | ... | 6 | 51 |
| Second | 1 | 3 | 6 | 1 | 4 | 2 | 5 | 4 | 4 | 4 | 5 | 1 | 43 |
| Third | 4 | 7 | 8 | 2 | 11 | 4 | 4 | 2 | 5 | ... | 4 | 5 | 56 |
| Fourth | 5 | 5 | 4 | 3 | 2 | 7 | 4 | ... | 3 | 1 | 6 | 2 | 42 |
| Fifth | 6 | 4 | 9 | 9 | 13 | 6 | 4 | 2 | 6 | 7 | 7 | 8 | 80 |
| Sixth | 5 | 5 | 5 | 6 | 3 | 11 | 4 | 4 | 9 | 7 | 9 | 8 | 76 |
| Seventh | 6 | 2 | 3 | 7 | 8 | 5 | 3 | 5 | 6 | 2 | 1 | 3 | 51 |
| Eighth | 2 | 2 | 7 | 6 | 4 | 7 | 4 | 3 | 7 | 2 | 5 | 4 | 53 |
| Ninth | 4 | 3 | 8 | 9 | 4 | 1 | 8 | 5 | 9 | 7 | 7 | 4 | 69 |
| Tenth | 14 | 10 | 10 | 9 | 10 | 10 | 3 | 14 | 7 | 4 | 3 | 4 | 98 |
| Eleventh | 9 | 5 | 4 | 5 | 7 | 7 | 5 | 5 | 2 | 3 | 6 | 2 | 60 |
| Twelfth | 5 | 13 | 9 | 9 | 11 | 8 | 9 | 7 | 5 | 11 | 11 | 8 | 106 |
| Thirteenth | 5 | 4 | 12 | 6 | 3 | 4 | 6 | 6 | 9 | 5 | 5 | 7 | 72 |
| Fourteenth | 7 | 10 | 8 | 5 | 8 | 7 | 3 | 8 | 9 | 9 | 6 | 8 | 88 |
| Fifteenth | 6 | 7 | 8 | 6 | 8 | 6 | 3 | 8 | 7 | 7 | 5 | 6 | 77 |
| Sixteenth | 7 | 14 | 13 | 7 | 12 | 7 | 7 | 8 | 6 | 8 | 3 | 6 | 98 |
| Seventeenth | 7 | 7 | 2 | 5 | 5 | 1 | 2 | 3 | 5 | 1 | 4 | 1 | 43 |
| Eighteenth | 3 | 3 | 2 | 1 | 2 | 3 | ... | 4 | 2 | 1 | 2 | 1 | 24 |
| Nineteenth | 8 | 2 | 9 | 10 | 6 | 5 | 3 | 13 | 5 | 7 | 10 | 6 | 84 |
| Twentieth | 2 | 2 | 2 | 3 | 5 | 5 | ... | 5 | 3 | 1 | 3 | 1 | 32 |
| Twenty-first | 3 | 7 | 6 | 1 | 8 | 7 | 5 | 2 | 3 | 7 | 3 | 4 | 56 |
| Twenty-second | 4 | 3 | 5 | 4 | 5 | 8 | 5 | 4 | 2 | 1 | 3 | 3 | 47 |
| Twenty-third | 7 | 9 | 10 | 6 | 2 | 1 | 6 | 4 | 3 | 1 | 4 | 5 | 58 |
| Twenty-fourth | 2 | 1 | 4 | 1 | 2 | 3 | 2 | 1 | 2 | ... | 2 | 4 | 24 |
| Twenty-fifth | 3 | 3 | 2 | 1 | 5 | 11 | 8 | 3 | 2 | 2 | 6 | 3 | 49 |
| Twenty-sixth | 9 | 9 | 7 | 5 | 2 | 2 | 9 | 5 | 3 | 3 | 5 | 5 | 64 |
| Twenty-seventh | ... | 5 | 3 | 1 | 1 | 1 | 3 | 2 | 2 | 2 | 1 | 3 | 24 |
| Twenty-eighth | 2 | 1 | 3 | ... | 4 | 4 | 1 | 3 | ... | 3 | ... | 2 | 23 |
| Twenty-ninth | 8 | 6 | 2 | 3 | 8 | 4 | 7 | 7 | 3 | 2 | 5 | 5 | 60 |
| Thirtieth | 5 | 12 | 12 | 12 | 12 | 10 | 10 | 11 | 3 | 8 | 6 | 9 | 110 |
| Thirty-first | 2 | 3 | 6 | 8 | 4 | 5 | 7 | 8 | 3 | 2 | 4 | 4 | 56 |
| Thirty-second | 4 | 8 | 6 | 4 | 5 | 4 | 3 | 2 | 3 | ... | 6 | 3 | 48 |
| Thirty-third | 7 | 1 | 1 | 4 | 5 | ... | 1 | 9 | 5 | 4 | 3 | 2 | 42 |
| Thirty-fourth | 3 | 6 | 5 | 4 | 7 | 3 | 7 | 5 | 6 | 6 | 4 | 8 | 64 |
| Public Institutions | 23 | 32 | 29 | 35 | 25 | 19 | 30 | 19 | 22 | 11 | 20 | 17 | 282 |
| Total | 196 | 215 | 235 | 205 | 231 | 190 | 184 | 194 | 174 | 145 | 174 | 167 | 2310 |

X. DEATHS FROM PNEUMONIA, BY WARDS AND MONTHS: 1896.

| PNEUMONIA DEATHS IN | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|---------------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| Ward First | 2 | 2 | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 4 | 4 | 24 |
| Second | 4 | 7 | 2 | 7 | 4 | 1 | 3 | 1 | 4 | 3 | 5 | 5 | 41 |
| Third | 6 | 5 | 6 | 3 | 3 | 1 | 3 | 1 | 1 | 2 | 2 | 4 | 36 |
| Fourth | 5 | 3 | 3 | 6 | 4 | 4 | 3 | 1 | 2 | 5 | 5 | 5 | 37 |
| Fifth | 7 | 5 | 4 | 3 | 3 | 3 | 3 | 1 | 1 | 6 | 2 | 5 | 43 |
| Sixth | 14 | 11 | 18 | 20 | 9 | 3 | 6 | 5 | 5 | 4 | 19 | 11 | 114 |
| Seventh | 5 | 8 | 7 | 14 | 1 | 3 | 2 | 1 | 6 | 5 | 5 | 5 | 62 |
| Eighth | 4 | 5 | 12 | 5 | 5 | 4 | 2 | 2 | 2 | 6 | 7 | 5 | 57 |
| Ninth | 3 | 11 | 11 | 9 | 2 | 3 | 2 | 4 | 2 | 2 | 2 | 9 | 58 |
| Tenth | 12 | 12 | 16 | 12 | 10 | 3 | 3 | 2 | 7 | 5 | 4 | 15 | 101 |
| Eleventh | 3 | 4 | 2 | 8 | 3 | 4 | 2 | 3 | 2 | 2 | 2 | 11 | 46 |
| Twelfth | 11 | 6 | 8 | 12 | 5 | 4 | 3 | 2 | 1 | 5 | 6 | 5 | 68 |
| Thirteenth | 3 | 4 | 6 | 6 | 5 | 4 | 2 | 1 | 1 | 7 | 4 | 4 | 43 |
| Fourteenth | 8 | 14 | 8 | 9 | 4 | 5 | 6 | 3 | 5 | 8 | 4 | 5 | 79 |
| Fifteenth | 8 | 11 | 19 | 16 | 7 | 6 | 4 | 1 | 4 | 5 | 7 | 11 | 99 |
| Sixteenth | 7 | 10 | 10 | 21 | 11 | 6 | 4 | 5 | 6 | 6 | 8 | 17 | 111 |
| Seventeenth | 8 | 5 | 4 | 8 | 3 | 3 | 1 | 1 | 2 | 1 | 4 | 1 | 41 |
| Eighteenth | 1 | 4 | 3 | 2 | 3 | 2 | 1 | 1 | 1 | 5 | ... | ... | 22 |
| Nineteenth | 6 | 10 | 13 | 8 | 7 | 3 | 6 | 2 | 2 | 7 | 6 | 9 | 79 |
| Twentieth | 2 | 3 | 4 | 2 | 2 | 1 | ... | 1 | 1 | 1 | 2 | 4 | 23 |
| Twenty-first | 2 | 5 | 7 | 10 | 4 | 3 | 2 | ... | 5 | 1 | 2 | 3 | 44 |
| Twenty-second | 6 | 6 | 6 | ... | 3 | ... | ... | ... | 2 | 4 | 5 | 3 | 32 |
| Twenty-third | 4 | 6 | 5 | 13 | 10 | 2 | 1 | ... | 3 | 4 | 4 | 6 | 58 |
| Twenty-fourth | 3 | 5 | 3 | 5 | 1 | 2 | ... | 1 | 3 | 3 | 1 | 1 | 28 |
| Twenty-fifth | 5 | 3 | 4 | 7 | 5 | 1 | 3 | 1 | 1 | 2 | 2 | 5 | 39 |
| Twenty-sixth | 5 | 8 | 7 | 12 | 9 | 2 | 8 | 2 | 2 | 1 | 5 | 6 | 76 |
| Twenty-seventh | 3 | 7 | 5 | 3 | 3 | ... | ... | 1 | 2 | 2 | 4 | 3 | 33 |
| Twenty-eighth | 5 | 5 | 3 | 3 | 1 | 2 | 1 | 6 | ... | 3 | 5 | 3 | 34 |
| Twenty-ninth | 8 | 8 | 5 | 4 | 4 | 5 | 5 | 1 | 1 | 3 | 6 | 9 | 59 |
| Thirtieth | 21 | 21 | 6 | 18 | 14 | 8 | 3 | 4 | 3 | 11 | 8 | 24 | 141 |
| Thirty-first | 7 | 7 | 1 | 6 | 4 | 6 | 2 | 1 | 1 | 1 | 2 | 8 | 46 |
| Thirty-second | 7 | 8 | 4 | 6 | 2 | 2 | 2 | ... | 2 | 3 | 5 | 5 | 46 |
| Thirty-third | 4 | 9 | 8 | 11 | 2 | 5 | 3 | 1 | 1 | 1 | 6 | 5 | 56 |
| Thirty-fourth | 10 | 4 | 10 | 10 | 1 | 2 | 1 | 1 | 2 | 7 | 9 | 8 | 65 |
| Public Institutions | 23 | 25 | 28 | 28 | 13 | 10 | 9 | 11 | 2 | 14 | 19 | 27 | 209 |
| Total | 232 | 267 | 260 | 315 | 168 | 111 | 95 | 59 | 78 | 128 | 165 | 263 | 2141 |

XI. DEATHS FROM DIPHTHERIA, BY WARDS AND MONTHS: 1896.

| DIPHTHERIA DEATHS IN | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|---------------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| Ward First | | | | | | 2 | | | | 2 | | 1 | 5 |
| Second | | | 1 | | 2 | | | 1 | | | 1 | 1 | 6 |
| Third | 2 | 1 | 2 | | | 1 | | 1 | 5 | 1 | | 1 | 14 |
| Fourth | 1 | 2 | | 1 | | | 1 | | | | 1 | | 6 |
| Fifth | 2 | 3 | 1 | 1 | | | 1 | 1 | 1 | | 2 | 3 | 14 |
| Sixth | 2 | | 4 | 3 | | | 1 | 3 | 3 | 3 | 5 | 2 | 26 |
| Seventh | 2 | 2 | 4 | 3 | | 2 | 1 | 3 | 4 | 9 | 2 | 4 | 36 |
| Eighth | 4 | 2 | 1 | 3 | 3 | | 2 | 2 | 3 | 8 | 4 | 5 | 37 |
| Ninth | 4 | 1 | | | 1 | 1 | | 3 | 3 | 5 | 1 | 6 | 25 |
| Tenth | 7 | 5 | 4 | 2 | 5 | 1 | 4 | 2 | 2 | 9 | 6 | 3 | 53 |
| Eleventh | 2 | 1 | 1 | 3 | 4 | 1 | | 1 | 3 | 5 | 1 | 1 | 23 |
| Twelfth | 8 | 2 | 2 | 8 | 2 | 2 | 1 | | 1 | 1 | 4 | 3 | 34 |
| Thirteenth | 6 | 3 | 5 | 4 | 6 | 1 | 2 | | 1 | 5 | | 1 | 34 |
| Fourteenth | 7 | 12 | 3 | 3 | 3 | 6 | 3 | | 4 | 6 | 3 | 4 | 54 |
| Fifteenth | 6 | 4 | 5 | 6 | 3 | 3 | 4 | 5 | 7 | 5 | 6 | 9 | 63 |
| Sixteenth | 10 | 8 | 4 | 3 | 4 | 2 | 1 | 2 | 3 | 3 | 2 | | 42 |
| Seventeenth | 1 | 2 | | 2 | | 1 | 3 | | 3 | 4 | | | 16 |
| Eighteenth | 2 | | 1 | | 1 | | | | 2 | 1 | | | 7 |
| Nineteenth | 2 | 1 | 2 | 5 | 1 | 2 | 5 | 1 | 7 | 3 | 6 | 5 | 40 |
| Twentieth | 2 | 3 | 2 | 1 | 2 | 2 | | 4 | 2 | 2 | 2 | 2 | 24 |
| Twenty-first | 1 | | | | 1 | 3 | | 2 | | 1 | 1 | | 9 |
| Twenty-second | 1 | 3 | 1 | 1 | 2 | | 4 | 1 | | | | 1 | 14 |
| Twenty-third | 2 | 2 | 1 | 2 | 2 | 5 | 1 | 1 | 2 | 3 | | | 21 |
| Twenty-fourth | 1 | 4 | 1 | | | | | 2 | | | 1 | 2 | 11 |
| Twenty-fifth | 1 | 5 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 6 | 2 | 28 |
| Twenty-sixth | 5 | 4 | 3 | 4 | 1 | 1 | 4 | 1 | 5 | 5 | 7 | 3 | 43 |
| Twenty-seventh | 2 | 1 | | 1 | | | | 1 | 3 | 2 | | 4 | 14 |
| Twenty-eighth | | 2 | 4 | 1 | 1 | 2 | 2 | 1 | 3 | 2 | 2 | 2 | 22 |
| Twenty-ninth | 5 | 4 | 3 | 5 | 1 | | 3 | 2 | 7 | 2 | 4 | 4 | 40 |
| Thirtieth | 15 | 1 | 3 | 4 | | 5 | 2 | 5 | 7 | 9 | 6 | 9 | 66 |
| Thirty-first | 5 | 5 | 2 | 1 | | | | | 1 | 6 | | 4 | 24 |
| Thirty-second | 1 | 1 | 3 | | | | | | | | 1 | 4 | 10 |
| Thirty-third | 3 | 3 | 4 | 3 | | 1 | 2 | 1 | 5 | 7 | 9 | 5 | 43 |
| Thirty-fourth | 4 | 2 | 4 | 1 | 1 | 2 | 1 | 3 | 1 | 2 | 4 | 4 | 29 |
| Public Institutions | 2 | | 3 | 1 | 2 | 2 | 4 | | 3 | 3 | | 3 | 23 |
| Total | 118 | 92 | 75 | 74 | 49 | 50 | 54 | 50 | 93 | 116 | 87 | 98 | 956 |

XII. DEATHS FROM BRONCHITIS, BY WARDS AND MONTHS: 1896.

| BRONCHITIS DEATHS IN | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|---------------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| Ward First | 2 | 2 | 2 | 2 | 1 | 3 | ... | ... | ... | 1 | ... | ... | 11 |
| Second | 2 | 2 | ... | 2 | 1 | 1 | 1 | ... | ... | 1 | ... | ... | 10 |
| Third | 1 | 4 | 2 | ... | 1 | 1 | 1 | ... | ... | 1 | ... | 4 | 15 |
| Fourth | 1 | ... | 3 | 2 | 1 | ... | 1 | ... | ... | ... | 1 | 1 | 10 |
| Fifth | 3 | 7 | 1 | 5 | 2 | 2 | 1 | 3 | ... | 5 | 3 | 6 | 38 |
| Sixth | 3 | 8 | 11 | 15 | 5 | 3 | 1 | 8 | 2 | 4 | 6 | 8 | 74 |
| Seventh | 3 | 3 | 8 | 6 | 4 | 1 | 1 | 3 | 3 | 2 | 1 | 3 | 38 |
| Eighth | 2 | 2 | 7 | 4 | 2 | 2 | ... | ... | ... | 5 | 3 | 3 | 30 |
| Ninth | 5 | 4 | 14 | 4 | 4 | 4 | 3 | ... | 4 | 4 | 2 | 3 | 49 |
| Tenth | 4 | 11 | 13 | 16 | 10 | 2 | 2 | 1 | 3 | 4 | 1 | 13 | 80 |
| Eleventh | 3 | 5 | 2 | 5 | ... | 2 | 2 | 2 | 1 | 4 | ... | 2 | 26 |
| Twelfth | 3 | 7 | 3 | 8 | 3 | ... | 1 | 2 | 1 | 2 | 2 | 2 | 34 |
| Thirteenth | 2 | 5 | 4 | 5 | 3 | ... | 2 | 3 | ... | 3 | 3 | 2 | 32 |
| Fourteenth | 3 | 2 | 6 | 12 | 3 | 6 | 4 | 1 | 3 | 1 | 4 | 6 | 51 |
| Fifteenth | 6 | 5 | 2 | 12 | 6 | 4 | 2 | 1 | 1 | 4 | 3 | 4 | 50 |
| Sixteenth | 3 | 7 | 7 | 15 | 11 | 3 | 1 | 2 | 6 | 5 | 8 | 11 | 79 |
| Seventeenth | 3 | 1 | 4 | 4 | 2 | 1 | 2 | ... | 3 | 1 | 2 | 1 | 24 |
| Eighteenth | ... | 2 | 1 | 3 | 2 | 1 | ... | ... | ... | 3 | 4 | ... | 16 |
| Nineteenth | 3 | 8 | 5 | 1 | 12 | 5 | 3 | 1 | 3 | 5 | 5 | 6 | 57 |
| Twentieth | 1 | 1 | 3 | 3 | 3 | 1 | ... | ... | 2 | ... | 1 | ... | 15 |
| Twenty-first | ... | 2 | 3 | 5 | 2 | 3 | ... | ... | ... | ... | ... | 1 | 16 |
| Twenty-second | 1 | 1 | 3 | 5 | 1 | 1 | ... | 2 | ... | 1 | 1 | ... | 16 |
| Twenty-third | 5 | 3 | 8 | 6 | 5 | 1 | 1 | 1 | 1 | 2 | 3 | 1 | 37 |
| Twenty-fourth | ... | 1 | 1 | 1 | 2 | 1 | ... | ... | ... | 1 | ... | 1 | 8 |
| Twenty-fifth | 1 | ... | 4 | 3 | 4 | ... | 3 | 1 | 1 | ... | 2 | 3 | 22 |
| Twenty-sixth | 3 | 5 | 8 | 11 | 4 | 2 | 3 | 1 | 2 | ... | 1 | 8 | 48 |
| Twenty-seventh | ... | 3 | 3 | 2 | 2 | ... | ... | ... | ... | ... | 1 | 4 | 15 |
| Twenty-eighth | 1 | 2 | ... | 2 | ... | ... | 2 | 1 | 2 | 1 | 2 | ... | 13 |
| Twenty-ninth | 2 | 3 | 4 | 2 | 7 | 1 | 1 | 3 | 2 | 3 | 3 | ... | 31 |
| Thirtieth | 8 | 8 | 6 | 10 | 9 | 6 | 3 | 2 | 5 | 7 | 7 | 8 | 77 |
| Thirty-first | 5 | 4 | 2 | 4 | 6 | 2 | 2 | 1 | 3 | 1 | 5 | 4 | 39 |
| Thirty-second | 2 | 1 | 3 | 4 | ... | 3 | 1 | 1 | ... | 1 | 1 | 1 | 18 |
| Thirty-third | 5 | 5 | 4 | 3 | 1 | 2 | 3 | ... | 4 | 4 | 3 | 7 | 41 |
| Thirty-fourth | 2 | 1 | 3 | 6 | 2 | 2 | 2 | ... | ... | 1 | 1 | 2 | 22 |
| Public Institutions | 3 | 2 | 2 | 2 | 3 | 2 | ... | 2 | ... | 2 | 2 | 3 | 23 |
| Total | 87 | 125 | 152 | 190 | 124 | 66 | 49 | 42 | 52 | 79 | 81 | 118 | 1165 |

XIII. DEATHS FROM TYPHOID FEVER, BY WARDS AND MONTHS: 1896.

| TYPHOID-FEVER DEATHS IN | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|---------------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| Ward First | | | | | | | 1 | 1 | | | | | 2 |
| Second | 1 | | 1 | | 1 | 2 | 1 | | | | 1 | 1 | 8 |
| Third | | | | | | 2 | | | | | | | 6 |
| Fourth | 1 | | 1 | 1 | | 1 | | 1 | 1 | | 1 | 2 | 9 |
| Fifth | 1 | 1 | | 1 | | | 2 | 1 | 1 | 2 | 2 | | 11 |
| Sixth | 1 | 1 | 3 | | 2 | 2 | 1 | 1 | 2 | 3 | 3 | 1 | 17 |
| Seventh | 1 | | 1 | 2 | 1 | | 2 | 2 | 3 | 1 | 3 | 2 | 18 |
| Eighth | 2 | 1 | 3 | | | | 3 | | 2 | | | | 11 |
| Ninth | 2 | 1 | 3 | 1 | 1 | 2 | 1 | 2 | 5 | 3 | 1 | 1 | 23 |
| Tenth | 2 | 9 | 2 | 5 | 1 | 2 | 3 | 3 | | 5 | | 5 | 37 |
| Eleventh | | 3 | | | 3 | 4 | | 1 | | 2 | 1 | 3 | 17 |
| Twelfth | 7 | 4 | 2 | | 3 | 2 | 3 | 4 | 6 | 2 | 1 | 1 | 34 |
| Thirteenth | 6 | 2 | 3 | 3 | 1 | 2 | 5 | 4 | 3 | 2 | 1 | | 32 |
| Fourteenth | 3 | 4 | 2 | | 1 | 1 | 2 | 3 | 1 | 1 | 5 | 1 | 24 |
| Fifteenth | 1 | 3 | | | | 2 | 3 | 2 | 4 | 3 | 2 | 1 | 21 |
| Sixteenth | | 9 | 2 | 2 | | | | 1 | 2 | 3 | | | 19 |
| Seventeenth | | | | | | 1 | 2 | 1 | | 1 | 1 | 1 | 7 |
| Eighteenth | 1 | | 1 | | | 1 | 1 | | 3 | 3 | 1 | 2 | 13 |
| Nineteenth | 3 | | | | 1 | 2 | 3 | 1 | 5 | 5 | 3 | | 23 |
| Twentieth | 1 | 2 | 1 | | 1 | 1 | 1 | | | | 1 | | 8 |
| Twenty-first | 6 | 3 | 2 | | 1 | | 4 | 1 | 1 | 4 | 1 | | 23 |
| Twenty-second | 2 | 6 | | | 1 | 1 | 1 | 2 | 2 | 1 | | 1 | 17 |
| Twenty-third | 1 | 3 | 1 | 1 | | | 2 | | 1 | 2 | | | 11 |
| Twenty-fourth | 4 | 2 | | 2 | 1 | | | | 1 | 1 | | | 11 |
| Twenty-fifth | 3 | 2 | 1 | 1 | | 1 | | 2 | | 4 | | | 14 |
| Twenty-sixth | 2 | 2 | 2 | 1 | 3 | 2 | | 4 | 4 | 3 | 4 | 1 | 28 |
| Twenty-seventh | 1 | | | | | | | 2 | 1 | 1 | | 1 | 6 |
| Twenty-eighth | 2 | | | 2 | | 1 | 1 | 1 | | 1 | 1 | | 9 |
| Twenty-ninth | 1 | | 3 | 1 | 1 | | | 1 | | 4 | | 3 | 14 |
| Thirtieth | 5 | 2 | 4 | 2 | | 3 | | 4 | 4 | 3 | 4 | 1 | 32 |
| Thirty-first | 6 | 1 | 4 | 1 | | | | 1 | 1 | 3 | 2 | 1 | 20 |
| Thirty-second | 3 | 1 | 3 | 1 | | | 1 | 2 | 3 | 1 | 2 | 1 | 18 |
| Thirty-third | 1 | 1 | 4 | 1 | 2 | 1 | | 1 | 2 | 1 | 1 | | 15 |
| Thirty-fourth | 2 | | 3 | 1 | | 2 | | 3 | 7 | 5 | 2 | | 25 |
| Public Institutions | 15 | 26 | 13 | 4 | 7 | 6 | 15 | 12 | 22 | 22 | 16 | 10 | 168 |
| Total | 87 | 89 | 65 | 33 | 31 | 44 | 58 | 64 | 87 | 89 | 60 | 44 | 751 |

XIV. DEATHS FROM SCARLET FEVER, BY WARDS AND MONTHS: 1896.

| SCARLET-FEVER DEATHS IN | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. |
|---------------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|
| Ward First | | | | | | | | | | | | | ... |
| Second | | | | | | | | | | | | | ... |
| Third | | | | 1 | | | | | | | | | 1 |
| Fourth | | | | | | | | | | | | | ... |
| Fifth | | | | | | 1 | | | | | | | 1 |
| Sixth | 1 | | 1 | | | 1 | | 1 | | | | | 4 |
| Seventh | | | | | | | | | | | | | ... |
| Eighth | 1 | | | | | | | | | | | | 1 |
| Ninth | 1 | | | | | | | | | | | | 1 |
| Tenth | 2 | | | | | | | 1 | | | 1 | | 4 |
| Eleventh | | | | | | | | | | | | | ... |
| Twelfth | | | | | | | | | | | | | ... |
| Thirteenth | | 1 | | | | | | | | 1 | | | 2 |
| Fourteenth | | | | | | | 1 | | | 2 | | 1 | 4 |
| Fifteenth | 1 | | 2 | | 1 | | | | 1 | 1 | 2 | 1 | 9 |
| Sixteenth | | | | | | | | | | | | 1 | 1 |
| Seventeenth | | | | | 1 | | | | | | | | 1 |
| Eighteenth | | | | | | | | | | | | | ... |
| Nineteenth | | | | | | | | | | | | | ... |
| Twentieth | | | | | | | | | | | 1 | | 1 |
| Twenty-first | | 1 | 1 | | 1 | | | | 1 | | 1 | 1 | 6 |
| Twenty-second | | | | | | | | | | | | | ... |
| Twenty-third | | | | | | | | | | | | | ... |
| Twenty-fourth | | | | | | | | | | | | | ... |
| Twenty-fifth | | | | 1 | | | | | | | | | 1 |
| Twenty-sixth | | 1 | 1 | | | | 1 | | 1 | | | 1 | 5 |
| Twenty-seventh | | | | | | | 1 | | | | | | 1 |
| Twenty-eighth | | | | | | | | | | | 2 | | 2 |
| Twenty-ninth | 1 | | | | 1 | | | | 1 | | | | 3 |
| Thirtieth | | | | | 1 | | | | 1 | | | | 2 |
| Thirty-first | | | | | | | 1 | | | | | | 1 |
| Thirty-second | | | | | | | | | | | | | ... |
| Thirty-third | | | | | | | | | | | | | ... |
| Thirty-fourth | | | | | | | 1 | | 1 | | | | 2 |
| Public Institutions | 1 | | | | | | | | | | | | 1 |
| Total | 8 | 3 | 5 | 2 | 5 | 2 | 5 | 3 | 5 | 4 | 5 | 7 | 54 |

**XV. COMPARATIVE MORTALITY FROM SPECIFIED DISEASES AND
MORTALITY OF CHILDREN, BY QUARTERS FOR
TEN YEARS: 1887-1896.**

| CAUSE OF DEATH. | WINTER QUARTER, 1896. | | | TOTAL WINTER MORTALITY FOR THE YEARS | | | | | | | | | |
|---------------------------------|-----------------------------|-----------|--------|---|------|------|------|------|------|------|------|------|------|
| | January. | February. | March. | 1896 | 1895 | 1894 | 1893 | 1892 | 1891 | 1890 | 1889 | 1888 | 1887 |
| Smallpox | 8 | 6 | 4 | 112 | 184 | 1 | 100 | 22 | 102 | 5 | 96 | 9 | 145 |
| Measles | 8 | 3 | 5 | 16 | 28 | 69 | 129 | 152 | 160 | 74 | 51 | 46 | 66 |
| Scarlet fever | 118 | 92 | 75 | 285 | 358 | 168 | 218 | 288 | 258 | 314 | 295 | 229 | 260 |
| Diphtheria | 7 | 24 | 17 | 48 | 78 | 108 | 147 | 138 | 110 | 115 | 85 | 185 | 125 |
| Croup | 8 | 5 | 5 | 18 | 40 | 37 | 33 | 41 | 64 | 55 | 20 | 60 | 14 |
| Whooping cough | 87 | 89 | 65 | 241 | 77 | 99 | 112 | 574 | 199 | 292 | 66 | 50 | 91 |
| Fever, typhoid | | | | 1 | 6 | 58 | 94 | 80 | 67 | 33 | 25 | 26 | 11 |
| cerebro-spinal | 6 | 3 | 5 | 14 | 12 | 8 | 13 | 26 | 32 | 31 | 17 | 16 | 23 |
| malarial | 41 | 13 | 17 | 71 | 32 | 44 | 93 | 113 | 141 | 151 | 29 | 38 | 79 |
| Diarrheal diseases | 2 | 9 | 3 | 14 | 134 | 31 | 60 | 92 | 90 | 57 | 47 | 72 | 54 |
| Other febrile or zymotic | 196 | 215 | 235 | 646 | 580 | 505 | 609 | 584 | 563 | 593 | 358 | 380 | 386 |
| Phthisis pulmonalis | 319 | 392 | 412 | 1123 | 1610 | 686 | 1486 | 1684 | 1927 | 1802 | 694 | 873 | 712 |
| Acute lung diseases | | | | | | | | | | | | | |
| Total | 800 | 851 | 844 | 2495 | 3125 | 2042 | 3095 | 3794 | 3713 | 3522 | 1783 | 1979 | 1966 |
| Children under five years | 780 | 750 | 752 | 2282 | 2759 | 3095 | 3000 | 2966 | 3332 | 2953 | 1734 | 1810 | 1858 |

COMPARATIVE MORTALITY OF SPRING QUARTER.

| CAUSE OF DEATH. | SPRING QUARTER, 1896. | | | TOTAL SPRING MORTALITY FOR THE YEARS | | | | | | | | | |
|---------------------------------|-----------------------------|------|-------|---|------|------|------|------|------|------|------|------|------|
| | April. | May. | June. | 1896 | 1895 | 1894 | 1893 | 1892 | 1891 | 1890 | 1889 | 1888 | 1887 |
| Smallpox | 4 | 8 | 7 | 31 | 581 | 1 | 92 | 37 | 102 | 17 | 77 | 40 | 149 |
| Measles | 2 | 5 | 2 | 9 | 21 | 47 | 85 | 99 | 108 | 42 | 55 | 50 | 39 |
| Scarlet fever | 74 | 49 | 50 | 173 | 140 | 125 | 214 | 183 | 145 | 183 | 246 | 179 | 196 |
| Diphtheria | 11 | 10 | 7 | 28 | 39 | 79 | 103 | 81 | 87 | 74 | 65 | 98 | 83 |
| Croup | 13 | 22 | 17 | 52 | 20 | 52 | 59 | 36 | 57 | 31 | 19 | 49 | 14 |
| Whooping cough | 33 | 31 | 44 | 108 | 78 | 92 | 174 | 181 | 711 | 234 | 46 | 54 | 71 |
| Fever, typhoid | | | | 1 | 1 | 72 | 140 | 54 | 121 | 44 | 30 | 68 | 19 |
| cerebro-spinal | 2 | 2 | 2 | 6 | 12 | 9 | 26 | 31 | 47 | 33 | 13 | 29 | 15 |
| malarial | 20 | 48 | 214 | 282 | 248 | 205 | 172 | 262 | 350 | 177 | 88 | 129 | 233 |
| Diarrheal diseases | | | | 1 | 27 | 13 | 63 | 76 | 68 | 57 | 40 | 36 | 46 |
| Other febrile or zymotic | 205 | 231 | 190 | 626 | 558 | 616 | 649 | 570 | 592 | 478 | 344 | 395 | 332 |
| Phthisis pulmonalis | 506 | 292 | 177 | 974 | 875 | 992 | 1214 | 897 | 1416 | 878 | 496 | 527 | 516 |
| Acute lung diseases | | | | | | | | | | | | | |
| Total | 869 | 700 | 710 | 2279 | 2119 | 2946 | 2992 | 2509 | 3804 | 2248 | 1519 | 1657 | 1715 |
| Children under five years | 874 | 713 | 858 | 2445 | 2185 | 2992 | 2787 | 2676 | 3542 | 1990 | 1489 | 1638 | 1726 |

COMPARATIVE MORTALITY OF SUMMER QUARTER.

| CAUSE OF DEATH. | SUMMER QUARTER, 1896. | | | TOTAL SUMMER MORTALITY FOR THE YEARS | | | | | | | | | |
|---------------------------------|-----------------------|---------|------------|--------------------------------------|------|------|------|------|------|------|------|------|------|
| | July. | August. | September. | 1896 | 1895 | 1894 | 1893 | 1892 | 1891 | 1890 | 1889 | 1888 | 1887 |
| Smallpox | 13 | 6 | 2 | 21 | 12 | 135 | 2 | 41 | 41 | 12 | 25 | 52 | 38 |
| Measles | 5 | 3 | 5 | 13 | 19 | 45 | 21 | 48 | 53 | 81 | 30 | 39 | 41 |
| Scarlet fever | 54 | 50 | 93 | 197 | 268 | 172 | 170 | 138 | 187 | 156 | 203 | 158 | 205 |
| Diphtheria | 8 | 3 | 13 | 24 | 67 | 100 | 85 | 92 | 71 | 64 | 56 | 64 | 56 |
| Croup | 28 | 24 | 28 | 80 | 39 | 97 | 86 | 58 | 43 | 71 | 35 | 54 | 47 |
| Whooping cough | 58 | 64 | 87 | 209 | 171 | 160 | 217 | 528 | 580 | 296 | 170 | 142 | 123 |
| Fever, typhoid | | | | | | | | | | | | | |
| cerebro-spinal | | | | | | | 74 | 92 | 58 | 57 | 39 | 29 | 30 |
| malarial | 3 | 3 | 2 | 8 | 14 | 7 | 18 | 61 | 32 | 32 | 25 | 34 | 23 |
| Diarrheal diseases | 539 | 373 | 138 | 1050 | 1253 | 2285 | 1802 | 1347 | 1286 | 1284 | 1350 | 1018 | 1036 |
| Other febrile or zymotic | | 1 | 1 | 2 | 4 | 2 | 40 | 53 | 40 | 31 | 28 | 26 | 32 |
| Phthisis pulmonalis | 184 | 194 | 174 | 552 | 515 | 546 | 531 | 498 | 469 | 470 | 378 | 322 | 328 |
| Acute lung diseases | 144 | 101 | 130 | 375 | 348 | 364 | 399 | 491 | 351 | 302 | 269 | 232 | 222 |
| Total | 1036 | 822 | 673 | 2531 | 2729 | 4028 | 3511 | 3418 | 3238 | 2787 | 2617 | 2173 | 2189 |
| Children under five years | 1357 | 1087 | 691 | 3135 | 3457 | 3511 | 4418 | 3763 | 3468 | 3174 | 3076 | 2714 | 2556 |

COMPARATIVE MORTALITY OF AUTUMN QUARTER.

| CAUSE OF DEATH. | AUTUMN QUARTER, 1896. | | | TOTAL AUTUMN MORTALITY FOR THE YEARS | | | | | | | | | |
|---------------------------------|-----------------------|-----------|-----------|--------------------------------------|------|------|------|------|------|------|------|------|------|
| | October. | November. | December. | 1896 | 1895 | 1894 | 1893 | 1892 | 1891 | 1890 | 1889 | 1888 | 1887 |
| Smallpox | | | | | 2 | 133 | 19 | | | | | | |
| Measles | 6 | 3 | 6 | 15 | 10 | 29 | 21 | 85 | 20 | 38 | 6 | 50 | 9 |
| Scarlet fever | 4 | 5 | 7 | 16 | 9 | 33 | 67 | 78 | 150 | 47 | 40 | 52 | 28 |
| Diphtheria | 116 | 87 | 98 | 301 | 614 | 376 | 273 | 405 | 368 | 228 | 382 | 292 | 341 |
| Croup | 16 | 9 | 17 | 42 | 28 | 278 | 157 | 223 | 132 | 127 | 177 | 92 | 139 |
| Whooping cough | 16 | 10 | 11 | 37 | 23 | 24 | 32 | 29 | 30 | 44 | 22 | 20 | 29 |
| Fever, typhoid | 89 | 60 | 44 | 193 | 192 | 141 | 167 | 206 | 507 | 186 | 171 | 129 | 96 |
| cerebro-spinal | | | | | 1 | 45 | 62 | 31 | 56 | 26 | 26 | 14 | 29 |
| malarial | 1 | 2 | 1 | 4 | 18 | 10 | 26 | 21 | 32 | 25 | 50 | 17 | 24 |
| Diarrheal diseases | 36 | 17 | 9 | 62 | 105 | 402 | 157 | 145 | 218 | 105 | 151 | 71 | 71 |
| Other febrile or zymotic | 1 | | 3 | 4 | 3 | 9 | 35 | 55 | 62 | 53 | 37 | 32 | 24 |
| Phthisis pulmonalis | 145 | 174 | 167 | 486 | 516 | 488 | 526 | 525 | 496 | 431 | 409 | 329 | 306 |
| Acute lung diseases | 207 | 246 | 381 | 834 | 659 | 664 | 925 | 832 | 873 | 709 | 616 | 543 | 402 |
| Total | 637 | 613 | 744 | 1994 | 2180 | 2632 | 2467 | 2635 | 2944 | 2019 | 2087 | 1641 | 1498 |
| Children under five years | 600 | 550 | 701 | 1851 | 2051 | 2477 | 2158 | 2257 | 2459 | 1836 | 1905 | 1331 | 1325 |

XVI. DEATHS FROM THE PRINCIPAL CAUSES AND PERCENTAGES OF DEATHS FROM ALL CAUSES: 1893-1896.

| CAUSES OF DEATH. | 1896. | | 1895. | | 1894. | | 1893. | |
|----------------------------------|-------------------|--------------------------|-------------------|--------------------------|-------------------|--------------------------|-------------------|--------------------------|
| | Number of deaths. | Per cent. of all causes. | Number of deaths. | Per cent. of all causes. | Number of deaths. | Per cent. of all causes. | Number of deaths. | Per cent. of all causes. |
| Diarrheal diseases | 1465 | 6.31 | 1638 | 6.77 | 2936 | 12.28 | 2224 | 8.21 |
| Consumption | 2310 | 9.96 | 2169 | 8.96 | 2155 | 9.01 | 2315 | 8.55 |
| Pneumonia | 2141 | 9.23 | 2359 | 9.74 | 1521 | 6.39 | 2457 | 9.10 |
| Brain diseases | 1200 | 5.16 | 1260 | 5.20 | 1243 | 5.20 | 1276 | 4.73 |
| Convulsions | 939 | 4.05 | 1113 | 4.60 | 1189 | 4.97 | 1326 | 4.90 |
| Bronchitis | 1165 | 5.02 | 1133 | 4.68 | 1185 | 4.98 | 1395 | 5.17 |
| Heart diseases | 1231 | 5.30 | 1306 | 5.39 | 1038 | 4.32 | 1177 | 4.35 |
| Smallpox ..... | ..... | ..... | 157 | .65 | 1033 | 4.32 | 23 | .08 |
| Diphtheria | 956 | 4.12 | 1420 | 5.87 | 841 | 3.53 | 975 | 3.60 |
| Cancerous diseases | 734 | 3.16 | 682 | 2.82 | 640 | 2.69 | 557 | 2.43 |
| Croup | 142 | .61 | 212 | .87 | 565 | 2.37 | 492 | 1.82 |
| Typhoid fever | 751 | 3.23 | 518 | 2.14 | 492 | 2.06 | 670 | 2.47 |
| Old age | 321 | 1.38 | 423 | 1.75 | 409 | 1.72 | 518 | 1.91 |
| Chronic nephritis | 656 | 2.83 | 511 | 2.11 | 344 | 1.43 | 257 | .95 |
| Whooping cough | 187 | .80 | 122 | .50 | 210 | .88 | 210 | .78 |
| Scarlet fever | 54 | .23 | 77 | .32 | 190 | .79 | 329 | 1.21 |
| Measles | 73 | .31 | 156 | .65 | 182 | .76 | 234 | .86 |
| Puerperal affections | 263 | 1.13 | 301 | 1.24 | 175 | .73 | 307 | 1.13 |
| Violence | 1364 | 5.88 | 1450 | 6.00 | 1541 | 6.44 | 1879 | 6.93 |
| All other causes | 7305 | 31.48 | 6312 | 26.08 | 6003 | 25.13 | 8362 | 30.97 |
| Total | 23252 | ..... | 24219 | ..... | 23892 | ..... | 27083 | ..... |
| Annual death rate per 1000 ..... | ..... | 14.44 | ..... | 15.14 | ..... | 15.24 | ..... | 16.92 |

XVII. DEATHS FROM THE PRINCIPAL FEBRILE OR ZYMOTIC DISEASES: 1889-1896, INCLUSIVE.

| CAUSES OF DEATH. | 1896 | 1895 | 1894 | 1893 | 1892 | 1891 | 1890 | 1889 |
|----------------------------|-------|------|------|-------|-------|-------|-------|-------|
| Cholera infantum | 1075 | 1257 | 2332 | 1623 | 1211 | 1122 | 1058 | 1082 |
| morbus | 44 | 88 | 53 | 55 | 53 | 53 | 58 | 64 |
| Diarrhea, infantile | 127 | 119 | 449 | ..... | ..... | ..... | ..... | ..... |
| Diarrhea | 150 | 110 | 40 | 145 | 223 | 375 | 245 | 167 |
| Dysentery | 69 | 64 | 64 | 456 | 380 | 445 | 356 | 331 |
| Erysipelas | 73 | 91 | 72 | 91 | 94 | 99 | 75 | 58 |
| Cerebro-spinal fever | 2 | 8 | 249 | 388 | 223 | 301 | 142 | 110 |
| Scarlet fever | 54 | 77 | 190 | 329 | 382 | 499 | 193 | 185 |
| Typhoid fever | 751 | 518 | 492 | 670 | 1489 | 1997 | 1008 | 453 |
| Measles | 73 | 156 | 182 | 234 | 185 | 265 | 67 | 204 |
| Smallpox ..... | ..... | 157 | 1033 | 2 | ..... | ..... | ..... | ..... |
| Diphtheria | 956 | 1420 | 1406 | 1467 | 1548 | 1358 | 1261 | 1509 |
| Total | 3374 | 4065 | 6562 | 5481 | 5790 | 6514 | 4463 | 3135 |

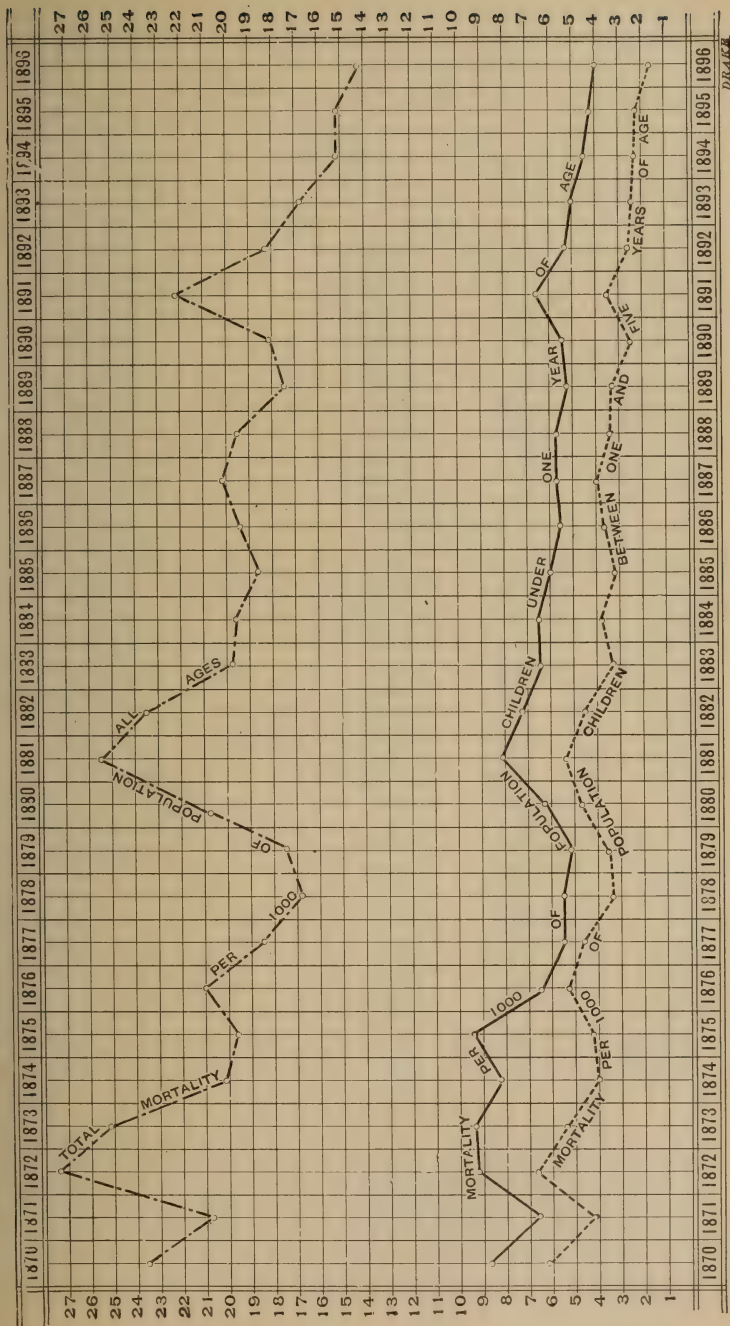
XVIII. DEATHS AND DEATH RATES FROM ALL CAUSES AND FROM FEBRILE OR ZYMOTIC DISEASES;
DEATH RATES OF CHILDREN AND INFANTS: 1882-1896, INCLUSIVE.

| YEARS. | Population. | Number of deaths. | Deaths from zymotic diseases. | Deaths from zymotic diseases per 1000 of population. | Per cent. of total mortality from zymotic diseases. | Deaths under 5 years of age. | Deaths of children under 5 years of age per 1000 of population. | Per cent. of mortality of children under 5 years of age. | Deaths of children under 1 year of age per 1000 of population. | Per cent. of total mortality of children under 1 year of age. |
|-----------|-------------|-------------------|-------------------------------|--|---|------------------------------|---|--|--|---|
| 1896..... | 1 619 226 | 23257 | 2076 | 1.29 | 8.95 | 9713 | 6.03 | 41.87 | 4.04 | 28.15 |
| 1895..... | 1 600 000 | 24219 | 2683 | 1.68 | 11.08 | 10452 | 6.53 | 43.17 | 4.26 | 28.17 |
| 1894..... | 1 567 727 | 23892 | 3286 | 2.09 | 13.75 | 11016 | 7.03 | 46.09 | 4.68 | 30.69 |
| 1893..... | 1 600 000 | 27083 | 5993 | 3.74 | 22.12 | 12363 | 7.72 | 45.64 | 5.07 | 30.00 |
| 1892..... | 1 428 000 | 26219 | 6275 | 4.36 | 23.89 | 11662 | 8.11 | 44.48 | 5.29 | 28.66 |
| 1891..... | 1 250 000 | 27754 | 7012 | 5.61 | 25.26 | 12801 | 10.24 | 46.13 | 6.56 | 28.57 |
| 1890..... | 1 200 000 | 21869 | 4908 | 4.09 | 22.44 | 9954 | 8.29 | 45.97 | 5.53 | 30.32 |
| 1889..... | 965 000 | 16946 | 4441 | 4.60 | 26.32 | 8204 | 8.41 | 48.42 | 5.07 | 28.88 |
| 1888..... | 830 000 | 15772 | 3952 | 4.76 | 24.92 | 7593 | 9.08 | 47.74 | 5.66 | 29.90 |
| 1887..... | 760 000 | 15409 | 4164 | 5.48 | 28.89 | 7568 | 9.96 | 49.44 | 5.90 | 30.09 |
| 1886..... | 704 000 | 13699 | 3437 | 4.88 | 25.09 | 6763 | 9.61 | 49.37 | 5.80 | 29.87 |
| 1885..... | 665 000 | 12474 | 3210 | 4.83 | 25.73 | 6187 | 9.32 | 49.61 | 6.02 | 32.06 |
| 1884..... | 630 000 | 12471 | 3506 | 5.56 | 28.11 | 6666 | 10.58 | 53.45 | 6.63 | 33.52 |
| 1883..... | 580 000 | 11555 | 3053 | 5.26 | 26.42 | 5875 | 10.13 | 50.84 | 6.64 | 33.23 |
| 1882..... | 560 639 | 13234 | 4506 | 8.05 | 34.07 | 6845 | 11.90 | 50.21 | 7.25 | 30.08 |

XIX. POPULATION (1896), TOTAL DEATHS AND DEATH RATES PER 1000 OF POPULATION FROM ALL CAUSES, FROM FEBRILE OR ZYMOTIC DISEASES AND FROM TYPHOID FEVER: 1894-1895-1896.

| WARD. | 1896. | | | 1895. | | | 1894. | | | ZYMOTICS. | | | | | | TYPHOID. | | | | | |
|---------------------------|------------------|------------------|--------|------------------|--------|------------------|--------|------------------|--------|-----------|--------|-------|--------|-------|--------|----------|--------|-------|--------|-------|--------|
| | | | | | | | | | | | | | | | | | | | | | |
| | Popula- tion. | Total deaths. | Ratio. | Total deaths. | Ratio. | Total deaths. | Ratio. | Total deaths. | Ratio. | 1896. | | 1895. | | 1894. | | 1896. | | 1895. | | 1894. | |
| | | | | | | | | | | No. | Ratio. | No. | Ratio. | No. | Ratio. | No. | Ratio. | No. | Ratio. | No. | Ratio. |
| First | 24 836 | 428 | 17.26 | 435 | 17.50 | 199 | 5.60 | 9 | 0.36 | 15 | 0.60 | 21 | 0.86 | 2 | 0.08 | 6 | 0.24 | 3 | 0.12 | 3 | 0.08 |
| Second | 29 937 | 326 | 10.90 | 340 | 11.39 | 329 | 9.70 | 20 | 0.66 | 22 | 0.73 | 35 | 1.17 | 8 | 0.26 | 3 | 0.10 | 8 | 0.27 | 8 | 0.27 |
| Third | 36 063 | 377 | 10.47 | 410 | 11.39 | 350 | 9.70 | 34 | 0.94 | 29 | 0.80 | 35 | 1.17 | 6 | 0.16 | 3 | 0.10 | 7 | 0.19 | 7 | 0.19 |
| Fourth | 41 225 | 373 | 9.05 | 390 | 9.46 | 338 | 9.01 | 30 | 0.72 | 20 | 0.60 | 35 | 1.17 | 9 | 0.26 | 9 | 0.26 | 6 | 0.18 | 6 | 0.18 |
| Fifth | 51 974 | 557 | 10.73 | 659 | 12.70 | 673 | 12.99 | 20 | 0.60 | 69 | 0.97 | 110 | 2.08 | 11 | 0.21 | 13 | 0.25 | 13 | 0.25 | 13 | 0.25 |
| Sixth | 62 742 | 959 | 15.30 | 1074 | 17.13 | 987 | 16.18 | 58 | 1.88 | 118 | 1.88 | 158 | 2.59 | 17 | 0.27 | 25 | 0.39 | 20 | 0.33 | 20 | 0.33 |
| Seventh | 41 990 | 543 | 12.96 | 587 | 14.01 | 590 | 12.34 | 65 | 1.55 | 79 | 1.90 | 68 | 1.60 | 18 | 0.43 | 9 | 0.21 | 11 | 0.24 | 11 | 0.24 |
| Eighth | 41 736 | 621 | 14.89 | 619 | 14.84 | 647 | 15.40 | 61 | 1.48 | 67 | 1.60 | 103 | 2.45 | 11 | 0.26 | 11 | 0.26 | 6 | 0.14 | 6 | 0.14 |
| Ninth | 56 390 | 685 | 12.16 | 779 | 13.83 | 786 | 16.03 | 60 | 1.07 | 70 | 1.24 | 155 | 3.12 | 23 | 0.40 | 10 | 0.18 | 11 | 0.22 | 11 | 0.22 |
| Tenth | 79 063 | 1030 | 13.04 | 1120 | 14.30 | 1160 | 16.03 | 115 | 1.46 | 134 | 1.70 | 286 | 3.97 | 37 | 0.47 | 14 | 0.18 | 8 | 0.11 | 8 | 0.11 |
| Eleventh | 41 523 | 453 | 10.92 | 456 | 10.98 | 381 | 8.73 | 45 | 1.08 | 54 | 1.30 | 39 | 0.89 | 17 | 0.41 | 8 | 0.19 | 6 | 0.11 | 6 | 0.11 |
| Twelfth | 73 507 | 1031 | 14.03 | 882 | 12.00 | 721 | 11.04 | 74 | 1.01 | 91 | 1.24 | 79 | 1.21 | 34 | 0.46 | 25 | 0.34 | 26 | 0.40 | 26 | 0.40 |
| Thirteenth | 51 053 | 606 | 11.88 | 677 | 13.26 | 540 | 11.18 | 76 | 1.49 | 86 | 1.69 | 65 | 1.35 | 32 | 0.62 | 14 | 0.27 | 16 | 0.33 | 16 | 0.33 |
| Fourteenth | 63 734 | 899 | 14.11 | 888 | 13.78 | 819 | 14.14 | 97 | 1.52 | 116 | 1.82 | 144 | 2.49 | 24 | 0.37 | 12 | 0.19 | 15 | 0.26 | 15 | 0.26 |
| Fifteenth | 71 762 | 914 | 12.75 | 942 | 13.14 | 857 | 12.62 | 104 | 1.45 | 131 | 1.83 | 159 | 2.34 | 21 | 0.29 | 22 | 0.30 | 17 | 0.25 | 17 | 0.25 |
| Sixteenth | 66 334 | 1049 | 15.82 | 1168 | 17.62 | 1090 | 16.34 | 76 | 1.15 | 134 | 2.02 | 134 | 2.01 | 19 | 0.26 | 19 | 0.26 | 17 | 0.25 | 17 | 0.25 |
| Seventeenth | 25 135 | 337 | 13.43 | 401 | 15.98 | 356 | 11.96 | 29 | 1.15 | 40 | 1.59 | 48 | 1.61 | 7 | 0.28 | 6 | 0.24 | 7 | 0.23 | 7 | 0.23 |
| Eighteenth | 27 866 | 226 | 8.13 | 239 | 10.75 | 256 | 6.37 | 25 | 0.90 | 23 | 0.83 | 29 | 0.79 | 13 | 0.47 | 5 | 0.18 | 6 | 0.16 | 6 | 0.16 |
| Nineteenth | 48 280 | 804 | 16.68 | 831 | 17.24 | 805 | 15.00 | 81 | 1.68 | 97 | 2.01 | 91 | 1.69 | 23 | 0.48 | 17 | 0.35 | 8 | 0.15 | 8 | 0.15 |
| Twentieth | 32 592 | 356 | 11.08 | 383 | 11.78 | 330 | 9.04 | 34 | 1.05 | 38 | 1.11 | 66 | 1.81 | 8 | 0.25 | 12 | 0.37 | 6 | 0.16 | 6 | 0.16 |
| Twenty-first | 34 029 | 463 | 13.32 | 463 | 13.32 | 463 | 13.32 | 43 | 1.26 | 45 | 1.32 | 69 | 1.82 | 23 | 0.68 | 10 | 0.29 | 15 | 0.39 | 15 | 0.39 |
| Twenty-second | 36 497 | 412 | 11.31 | 431 | 11.84 | 416 | 11.39 | 39 | 1.07 | 57 | 1.58 | 48 | 1.18 | 17 | 0.47 | 10 | 0.28 | 5 | 0.12 | 5 | 0.12 |
| Twenty-third | 40 199 | 492 | 12.27 | 550 | 13.71 | 582 | 11.32 | 37 | 0.92 | 72 | 1.79 | 79 | 1.58 | 11 | 0.27 | 12 | 0.30 | 17 | 0.36 | 17 | 0.36 |
| Twenty-fourth | 36 157 | 300 | 8.33 | 276 | 7.64 | 240 | 5.94 | 27 | 0.75 | 28 | 0.78 | 25 | 0.62 | 11 | 0.30 | 7 | 0.19 | 5 | 0.12 | 5 | 0.12 |
| Twenty-fifth | 44 674 | 460 | 10.09 | 404 | 9.06 | 388 | 10.80 | 48 | 1.08 | 58 | 1.30 | 72 | 2.01 | 14 | 0.31 | 11 | 0.24 | 14 | 0.39 | 14 | 0.39 |
| Twenty-sixth | 57 815 | 715 | 12.37 | 706 | 12.21 | 609 | 10.87 | 82 | 1.42 | 97 | 1.69 | 109 | 2.30 | 28 | 0.48 | 10 | 0.17 | 12 | 0.25 | 12 | 0.25 |
| Twenty-seventh | 25 164 | 305 | 12.15 | 268 | 10.68 | 279 | 14.23 | 25 | 1.00 | 32 | 1.27 | 47 | 2.40 | 7 | 0.24 | 7 | 0.24 | 4 | 0.12 | 4 | 0.12 |
| Twenty-eighth | 22 701 | 306 | 13.57 | 300 | 13.21 | 234 | 12.85 | 38 | 1.67 | 28 | 1.23 | 37 | 2.03 | 9 | 0.39 | 3 | 0.13 | 14 | 0.34 | 14 | 0.34 |
| Twenty-ninth | 39 334 | 582 | 14.81 | 582 | 14.81 | 585 | 14.27 | 66 | 1.67 | 63 | 1.60 | 88 | 2.14 | 14 | 0.35 | 16 | 0.40 | 14 | 0.34 | 14 | 0.34 |
| Thirtieth | 93 154 | 1210 | 13.00 | 1219 | 13.09 | 1197 | 14.15 | 128 | 1.37 | 128 | 1.37 | 205 | 2.42 | 32 | 0.34 | 19 | 0.20 | 25 | 0.29 | 25 | 0.29 |
| Thirty-first | 44 391 | 555 | 12.53 | 568 | 12.82 | 509 | 12.99 | 54 | 1.22 | 72 | 1.62 | 70 | 1.73 | 20 | 0.45 | 10 | 0.22 | 12 | 0.30 | 12 | 0.30 |
| Thirty-second | 54 134 | 551 | 10.18 | 540 | 9.98 | 437 | 9.10 | 32 | 0.59 | 50 | 0.92 | 48 | 1.05 | 18 | 0.38 | 12 | 0.22 | 9 | 0.19 | 9 | 0.19 |
| Thirty-third | 41 485 | 685 | 16.79 | 686 | 16.57 | 529 | 15.38 | 66 | 1.22 | 77 | 1.86 | 60 | 1.74 | 15 | 0.36 | 12 | 0.29 | 14 | 0.40 | 14 | 0.40 |
| Thirty-fourth | 65 508 | 707 | 10.97 | 704 | 12.38 | 704 | 12.38 | 71 | 1.08 | 133 | 2.03 | 139 | 2.46 | 25 | 0.38 | 17 | 0.26 | 17 | 0.31 | 17 | 0.31 |
| Public Institutions ..... | ..... | 2864 | ..... | 3064 | ..... | 2853 | ..... | 207 | ..... | ..... | ..... | ..... | ..... | 168 | ..... | ..... | ..... | 119 | ..... | ..... | ..... |
| Violence ..... | ..... | ..... | ..... | ..... | ..... | 1653 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| Total | 1 600 000 | 23 257 | 14.44 | 24 219 | 15.14 | 23 862 | 15.24 | 2076 | 1.29 | 2683 | 1.68 | 3850 | 2.45 | 751 | 0.47 | 518 | 0.32 | 492 | 0.31 | 492 | 0.31 |

DIAGRAM OF CHICAGO MORTALITY: 1870-1896. DEATHS AT ALL AGES; AT UNDER 1 YEAR; AT BETWEEN 1 AND 5 YEARS—PER 1000 OF TOTAL YEARLY POPULATIONS OF 1870-1896.



Upper line shows fluctuation in annual all-ages death rate per 1000 of population for 27 years. Decline since 1872 is *forty-eight* (48) per cent.
 Middle line shows fluctuation in annual infant (under one year) death rate per 1000 of total population. Decline since 1875 is *fifty-seven* (57) per cent.
 Lower line shows fluctuation in annual one-to-five years death rate per 1000 of total population. Decline since 1872 is *seventy-one* (71) per cent.

XX. POPULATION, DEATHS AND DEATH RATES, BY YEARS:
1843-1896, INCLUSIVE.

| YEARS. | Population. | Number of deaths. | Number of deaths in 1000 of population. |
|-----------|-------------|-------------------------|---|
| 1896..... | 1 619 226 | 23 257 | 14.36 |
| 1895..... | 1 600 000 | 24 219 | 15.14 |
| 1894..... | 1 567 727 | 23 892 | 15.24 |
| 1893..... | 1 600 000 | 27 083 | 16.92 |
| 1892..... | 1 438 010 | 26 219 | 18.23 |
| 1891..... | 1 250 000 | 27 754 | 22.20 |
| 1890..... | 1 208 669 | 21 869 | 18.09 |
| 1889..... | 935 000 | 16 946 | 17.56 |
| 1888..... | 802 651 | 15 772 | 19.65 |
| 1887..... | 760 000 | 15 409 | 20.27 |
| 1886..... | 703 715 | 13 699 | 19.42 |
| 1885..... | 665 000 | 12 474 | 18.76 |
| 1884..... | 629 885 | 12 471 | 19.80 |
| 1883..... | 580 000 | 11 555 | 19.92 |
| 1882..... | 560 693 | 13 234 | 23.60 |
| 1881..... | 540 000 | 13 874 | 25.60 |
| 1880..... | 503 298 | 10 462 | 20.79 |
| 1879..... | 491 516 | 8 614 | 17.52 |
| 1878..... | 436 731 | 7 422 | 16.99 |
| 1877..... | 430 000 | 8 026 | 18.68 |
| 1876..... | 407 661 | 8 573 | 21.02 |
| 1875..... | 400 500 | 7 899 | 19.72 |
| 1874..... | 395 408 | 8 075 | 20.29 |
| 1873..... | 380 000 | 9 557 | 25.16 |
| 1872..... | 367 396 | 10 156 | 27.67 |
| 1871..... | 334 270 | 6 976 | 20.87 |
| 1870..... | 306 605 | 7 323 | 23.88 |
| 1869..... | 280 000 | 6 488 | 23.10 |
| 1868..... | 252 054 | 5 984 | 23.70 |
| 1867..... | 225 000 | 4 648 | 21.10 |
| 1866..... | 200 418 | 5 931 | 32.20 |
| 1865..... | 178 492 | 3 663 | 22.50 |
| 1864..... | 169 353 | 4 448 | 26.26 |
| 1863..... | 150 000 | 3 885 | 25.80 |
| 1862..... | 138 186 | 2 835 | 20.51 |
| 1861..... | 120 000 | 2 279 | 18.90 |
| 1860..... | 109 206 | 2 264 | 20.70 |
| 1859..... | 93 000 | 2 008 | 21.30 |
| 1858..... | 90 000 | 2 225 | 24.72 |
| 1857..... | 87 600 | 2 414 | 27.55 |
| 1856..... | 84 113 | 2 086 | 24.80 |
| 1855..... | 80 023 | 2 181 | 27.20 |
| 1854..... | 65 872 | 4 217 | 64.00 |
| 1853..... | 59 130 | 1 325 | 22.40 |
| 1852..... | 38 734 | 1 809 | 46.70 |
| 1851..... | 34 000 | 927 | 36.60 |
| 1850..... | 29 963 | 1 467 | 48.90 |
| 1849..... | 23 047 | 1 701 | 73.80 |
| 1848..... | 20 023 | 638 | 31.80 |
| 1847..... | 16 859 | 572 | 33.90 |
| 1846..... | 14 169 | 394 | 27.80 |
| 1845..... | 12 088 | 344 | 28.40 |
| 1844..... | 10 170 | 336 | 33.00 |
| 1843..... | 7 580 | 141 | 18.60 |

NOTE.—The figures of population in this table are those of the United States Census for the years 1850, 1860, 1870 and 1880; of the State Census for 1845, 1855 and 1865; of the City Census for the years 1843, 1846, 1847, 1848, 1849, 1853, 1856 and 1862; of the Official Census under the School Law for every even-numbered year thereafter. For the intermediate (odd-numbered) years the population is estimated. Except for the year 1893 the estimated population of each intermediate year has been fully sustained by the Official Census of the next succeeding year; the exception was due to the exceptional increase of population during the World's Fair year, not all of which was added to the permanent population. The population for 1896, accepted by the Department, is that fixed by the School Census, July 1, 1896.

PART IV

Chronological Summary

OF

CHICAGO MORTALITY

1851-1896

NOTES ON THE CHRONOLOGICAL SUMMARY OF CHICAGO MORTALITY.

THE following tables have been compiled* from the Annual Reports of the various Health Officers, Sanitary Superintendents and COMMISSIONERS; from the early files of the *Chicago Medical Examiner*, in which for many years Dr. N. S. DAVIS, Sr., made a feature of such information; from Dr. JOHN H. RAUCH'S *Sanitary History of Chicago: 1833-1870*; from reports on the *Cholera Epidemic of 1873* (Ex. Doc. No. 95, 43d Cong.), by Drs. JOHN M. WOODWORTH and F. W. REILLY, U. S. M. H. S., and Surgeon ELY MCCLELLAN, U. S. A.; and from *Zymotic Diseases in Chicago: 1890-1892*, by Dr. F. W. REILLY, Secretary of the Illinois State Board of Health (1893).

No monthly records for the year 1876 have been discovered. Prior to July, 1876, the health administration of Chicago was under the charge of an officer styled Sanitary Superintendent. The present form of administration—that of a DEPARTMENT OF HEALTH—was created by a Municipal Ordinance of July 19, 1876, and the first COMMISSIONER OF HEALTH, Dr. BROCK MCVICKAR, was appointed July 24, but resigned November 22d of the same year, and the office remained vacant until January 29, 1877, when Dr. O. C. DEWOLF was appointed COMMISSIONER.

Mr. H. P. WRIGHT, Registrar of Vital Statistics in 1876, made a report in manuscript for that year to the Mayor and City Council; but in the first published report of the DEPARTMENT, dated January 1, 1878, and being for the years 1876-77, only the total number of deaths from specified causes for 1876 are given—not the returns by months.

The following tables are, therefore, defective to this extent, and also, in a minor degree, as to the year 1871, some of the monthly records of that year having been destroyed in the Great Fire of October 8-9, 1871.

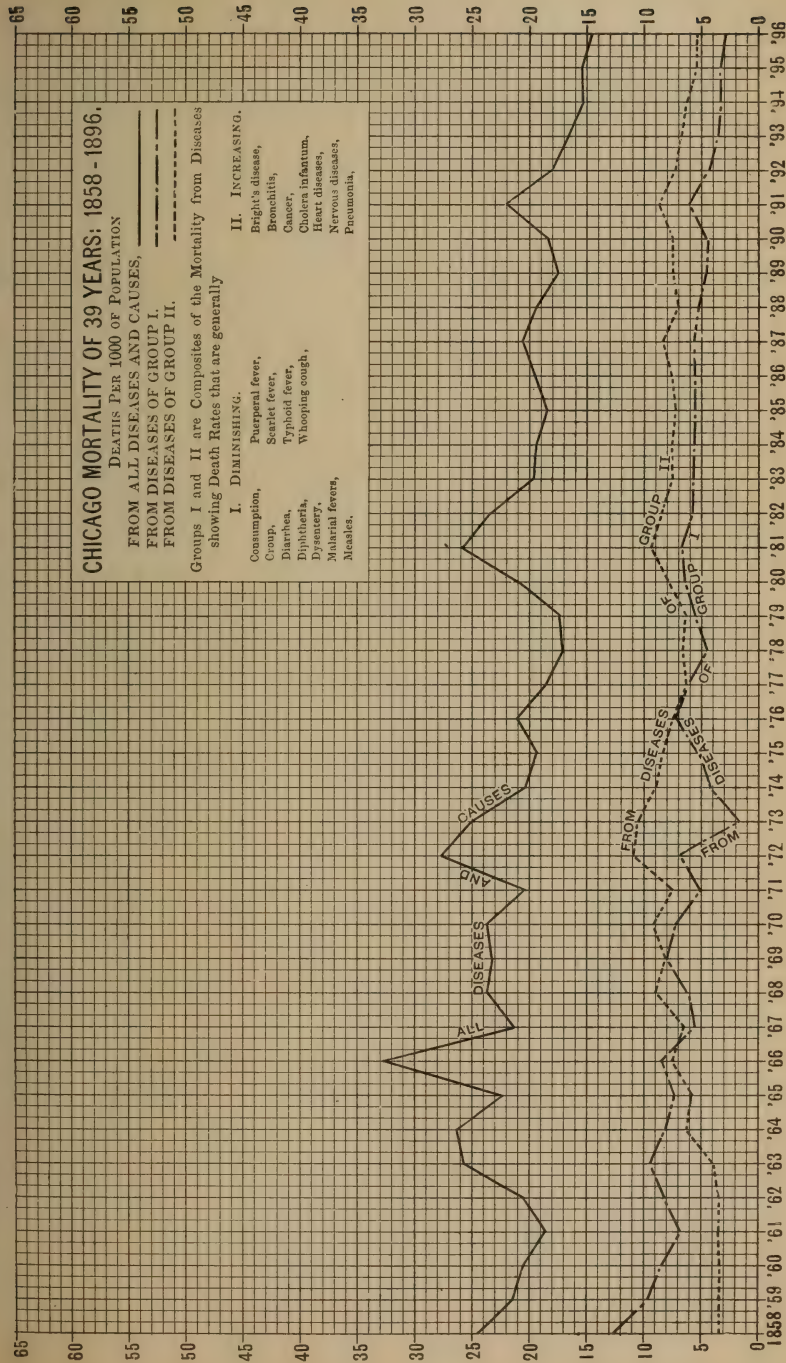
The total mortality from specified causes is, however, given for each year for the entire period of forty-six years, and with increasing fullness and accuracy since the passage and enforcement of the ordinance of December 10, 1891, forbidding the burial or removal of any dead human body within the corporate limits of the city without a permit from the COMMISSIONER OF HEALTH, which permit is given only upon a legally-qualified physician's certificate of the cause of death.—F. W. R.

*Originally for the 1894 Report, under DR. ARTHUR R. REYNOLDS, COMMISSIONER OF HEALTH, 1893-95. To these, which covered the period from 1851 to 1894 inclusive, are now added the figures for the years 1895 and 1896, and a table of Erysipelas mortality for the same period.

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ANNUAL DEATH RATES PER 1000 OF CHICAGO POPULATION FOR 39 YEARS: 1858-1896 INCLUSIVE.



Chronological Summary of Principal Causes of Mortality

IN THE CITY OF CHICAGO: 1851-1896, INCLUSIVE.

CONSUMPTION.

Deaths as reported by months—Totals by years—Percentages of the mortality from all causes—Deaths per 10 000 of population—Annual death rates from all causes—For the years 1851 to 1896 inclusive.

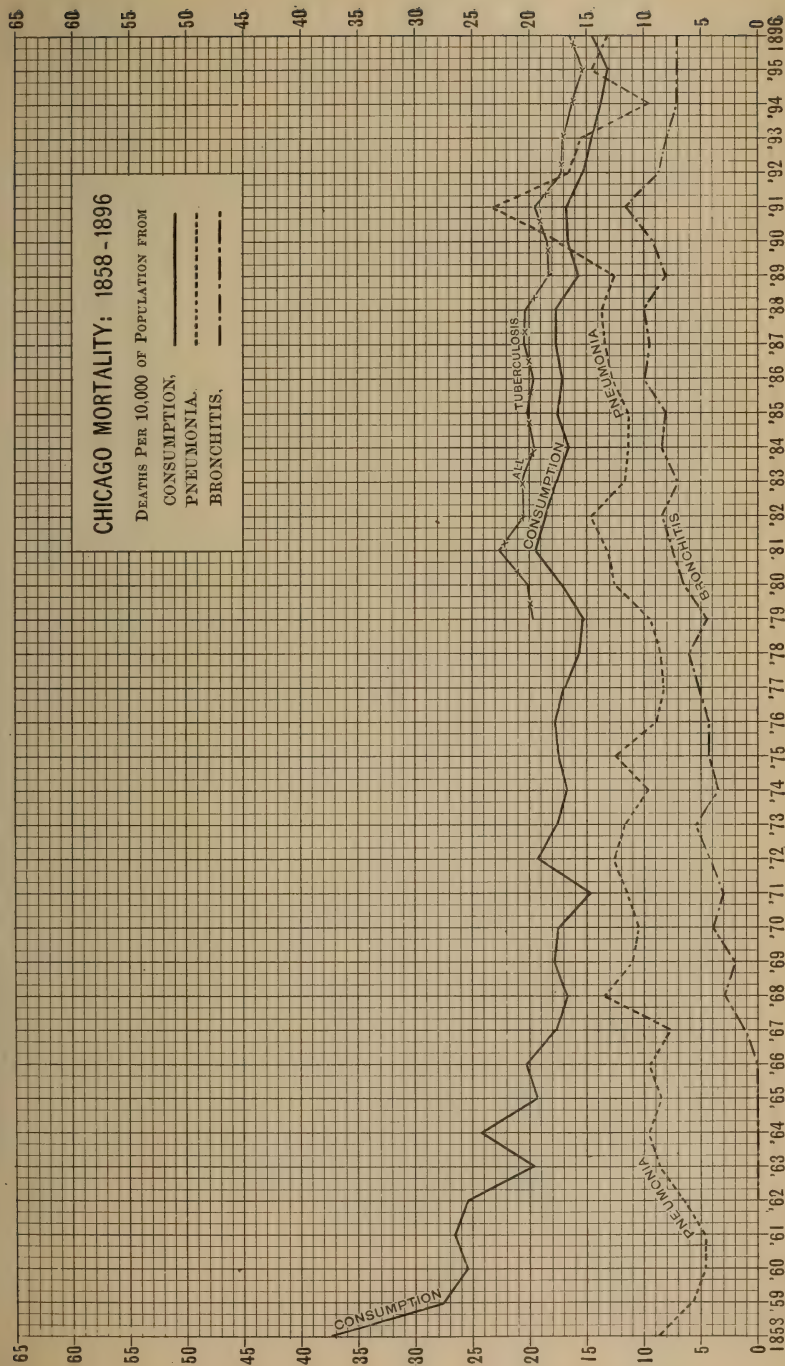
| YEARS. | MONTHS. | | | | | | | | | | | | | CONSUMPTION MORTALITY. | | Annual death rates from all causes per 1000 of population. |
|-----------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|---------------------------------|---------------------------|--|
| | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. | Percentages of total mortality. | Per 10 000 of population. | |
| 1851..... | | | | | | 4 | 6 | 4 | 9 | 5 | 6 | 8 | 42 | 4.53 | 12.35 | 36.60 |
| 1852..... | 4 | 6 | 7 | 12 | 7 | 9 | 7 | 10 | 11 | 17 | 10 | 16 | 116 | 6.41 | 30.00 | 46.70 |
| 1853..... | 14 | 7 | 9 | 9 | 15 | 13 | 7 | 17 | 20 | 12 | 19 | 24 | 176 | 13.28 | 29.83 | 22.40 |
| 1854..... | 26 | 14 | 17 | 21 | 13 | 26 | 7 | 19 | 14 | 29 | 20 | 10 | 216 | 5.12 | 32.73 | 64.00 |
| 1855..... | 9 | 8 | 22 | 17 | 19 | 5 | 7 | 12 | 16 | 15 | 17 | 15 | 162 | 7.43 | 20.25 | 27.20 |
| 1856..... | 27 | 24 | 17 | 12 | 17 | 19 | 24 | 26 | 22 | 30 | 42 | 28 | 288 | 13.86 | 34.29 | 24.80 |
| 1857..... | 19 | 24 | 20 | 25 | 22 | 16 | 12 | 14 | 29 | 32 | 21 | 21 | 255 | 10.56 | 29.11 | 27.55 |
| 1858..... | 23 | 31 | 38 | 21 | 24 | 27 | 38 | 32 | 18 | 26 | 26 | 30 | 334 | 15.01 | 37.11 | 24.72 |
| 1859..... | 24 | 22 | 13 | 31 | 25 | 13 | 17 | 14 | 24 | 32 | 22 | 19 | 256 | 12.75 | 27.53 | 21.30 |
| 1860..... | 21 | 22 | 26 | 19 | 16 | 18 | 25 | 26 | 17 | 21 | 32 | 33 | 276 | 12.19 | 25.28 | 20.70 |
| 1861..... | 34 | 24 | 25 | 23 | 18 | 22 | 14 | 28 | 44 | 19 | 31 | 38 | 320 | 14.04 | 26.66 | 18.90 |
| 1862..... | 33 | 38 | 46 | 35 | 23 | 23 | 23 | 20 | 23 | 41 | 26 | 17 | 348 | 12.27 | 25.22 | 20.51 |
| 1863..... | 20 | 29 | 37 | 28 | 23 | 16 | 22 | 18 | 24 | 21 | 15 | 30 | 283 | 7.28 | 18.87 | 25.80 |
| 1864..... | 37 | 41 | 39 | 39 | 40 | 31 | 32 | 27 | 28 | 25 | 41 | 30 | 410 | 9.22 | 24.26 | 26.26 |
| 1865..... | 34 | 32 | 30 | 35 | 30 | 18 | 23 | 31 | 31 | 32 | 18 | 26 | 340 | 9.28 | 19.05 | 22.50 |
| 1866..... | 25 | 18 | 34 | 38 | 39 | 22 | 28 | 39 | 31 | 46 | 43 | 43 | 406 | 6.85 | 20.30 | 32.20 |
| 1867..... | 42 | 44 | 40 | 31 | 34 | 35 | 34 | 23 | 25 | 25 | 34 | 37 | 404 | 8.69 | 17.95 | 21.10 |
| 1868..... | 38 | 42 | 43 | 29 | 38 | 23 | 34 | 43 | 36 | 36 | 34 | 23 | 422 | 7.05 | 16.75 | 23.70 |
| 1869..... | 46 | 34 | 31 | 54 | 45 | 37 | 40 | 38 | 46 | 46 | 49 | 51 | 503 | 7.75 | 17.96 | 23.10 |
| 1870..... | 43 | 38 | 46 | 57 | 57 | 45 | 41 | 44 | 35 | 53 | 49 | 33 | 541 | 7.39 | 17.68 | 23.88 |
| 1871..... | 51 | 46 | 54 | 48 | 51 | 43 | 48 | 46 | .... | 36 | 33 | 44 | 500 | 7.17 | 14.97 | 20.87 |
| 1872..... | 51 | 61 | 49 | 67 | 56 | 56 | 61 | 55 | 59 | 59 | 54 | 82 | 710 | 6.99 | 19.35 | 27.67 |
| 1873..... | 50 | 58 | 60 | 63 | 52 | 49 | 41 | 51 | 48 | 53 | 56 | 58 | 639 | 6.69 | 16.80 | 25.16 |
| 1874..... | 53 | 54 | 67 | 54 | 54 | 41 | 40 | 43 | 53 | 64 | 53 | 54 | 630 | 7.80 | 15.95 | 20.29 |
| 1875..... | 59 | 55 | 71 | 67 | 72 | 48 | 42 | 44 | 48 | 68 | 57 | 62 | 693 | 8.77 | 17.32 | 19.72 |
| 1876..... | | | | | | | | | | | | | 732 | 8.54 | 17.96 | 21.02 |
| 1877..... | 62 | 56 | 82 | 71 | 72 | 66 | 56 | 59 | 44 | 56 | 53 | 56 | 733 | 9.13 | 17.00 | 18.68 |
| 1878..... | 49 | 54 | 78 | 60 | 65 | 44 | 61 | 52 | 59 | 65 | 60 | 50 | 697 | 9.39 | 15.96 | 16.99 |
| 1879..... | 68 | 59 | 63 | 67 | 64 | 64 | 54 | 54 | 49 | 72 | 63 | 68 | 745 | 8.65 | 15.17 | 17.52 |
| 1880..... | 70 | 75 | 92 | 79 | 64 | 72 | 66 | 71 | 70 | 80 | 59 | 55 | 853 | 8.15 | 16.95 | 20.79 |
| 1881..... | 99 | 76 | 82 | 115 | 84 | 71 | 85 | 77 | 78 | 81 | 92 | 97 | 1037 | 7.48 | 19.20 | 25.60 |
| 1882..... | 120 | 95 | 112 | 75 | 93 | 88 | 91 | 70 | 71 | 68 | 65 | 94 | 1042 | 7.87 | 18.61 | 23.60 |
| 1883..... | 99 | 79 | 94 | 93 | 99 | 71 | 83 | 73 | 94 | 60 | 80 | 91 | 1016 | 8.79 | 17.52 | 19.92 |
| 1884..... | 84 | 65 | 94 | 105 | 88 | 95 | 80 | 72 | 72 | 76 | 97 | 106 | 1034 | 8.29 | 16.41 | 19.80 |
| 1885..... | 109 | 100 | 107 | 109 | 110 | 80 | 91 | 84 | 88 | 94 | 103 | 87 | 1162 | 9.31 | 17.47 | 18.76 |
| 1886..... | 92 | 86 | 112 | 126 | 125 | 113 | 88 | 91 | 85 | 92 | 85 | 104 | 1199 | 8.77 | 17.03 | 19.43 |
| 1887..... | 135 | 114 | 137 | 116 | 119 | 97 | 112 | 125 | 91 | 105 | 100 | 101 | 1352 | 8.77 | 17.79 | 20.27 |
| 1888..... | 124 | 132 | 124 | 130 | 135 | 130 | 112 | 103 | 107 | 114 | 111 | 104 | 1426 | 9.04 | 17.75 | 19.65 |
| 1889..... | 112 | 112 | 134 | 117 | 126 | 101 | 131 | 126 | 121 | 139 | 126 | 144 | 1489 | 8.78 | 15.92 | 17.56 |
| 1890..... | 224 | 178 | 191 | 166 | 181 | 131 | 150 | 167 | 153 | 138 | 143 | 150 | 1972 | 9.02 | 16.32 | 18.09 |
| 1891..... | 159 | 173 | 231 | 231 | 212 | 149 | 164 | 171 | 134 | 160 | 154 | 182 | 2120 | 7.64 | 16.96 | 22.20 |
| 1892..... | 188 | 188 | 208 | 202 | 191 | 177 | 192 | 155 | 151 | 160 | 167 | 198 | 2177 | 8.30 | 15.14 | 18.23 |
| 1893..... | 198 | 198 | 213 | 203 | 253 | 193 | 186 | 166 | 179 | 147 | 169 | 210 | 2315 | 8.55 | 14.47 | 16.92 |
| 1894..... | 177 | 152 | 176 | 200 | 229 | 187 | 178 | 185 | 183 | 165 | 152 | 171 | 2155 | 9.02 | 13.74 | 15.24 |
| 1895..... | 171 | 192 | 217 | 205 | 197 | 156 | 187 | 167 | 161 | 179 | 165 | 172 | 2169 | 8.96 | 13.56 | 15.14 |
| 1896..... | 196 | 215 | 235 | 205 | 231 | 190 | 184 | 194 | 174 | 145 | 174 | 167 | 2310 | 9.95 | 14.26 | 14.36 |

NOTE TO CONSUMPTION TABLE.

Beginning with the year 1879 deaths from *Tuberculosis* other than *Pulmonary* have been recorded separately. The following additions should, therefore, be made to the figures in the preceding Table for the years 1879-1896 inclusive, in order to arrive at the full proportions of the mortality from the tuberculosis diseases:

| YEARS. | DEATHS FROM | | Total deaths from Tuberculosis. | TUBERCULOSIS MORTALITY. | | Annual death rates from all causes per 1000 of population. |
|-----------|--------------|--------------------------|------------------------------------|---------------------------------------|------------------------------|--|
| | Consumption. | Other Tuber- culosis. | | Percentages of total mortality. | Per 10 000 of population. | |
| 1879..... | 745 | 232 | 977 | 11.34 | 19.88 | 17.52 |
| 1880..... | 853 | 169 | 1022 | 9.77 | 20.31 | 20.79 |
| 1881..... | 1037 | 202 | 1239 | 8.79 | 22.94 | 25.60 |
| 1882..... | 1042 | 190 | 1132 | 8.55 | 20.19 | 23.60 |
| 1883..... | 1016 | 181 | 1197 | 10.36 | 20.64 | 19.92 |
| 1884..... | 1034 | 199 | 1233 | 9.97 | 19.57 | 19.89 |
| 1885..... | 1162 | 172 | 1334 | 10.69 | 20.07 | 18.76 |
| 1886..... | 1199 | 184 | 1383 | 10.09 | 19.64 | 19.43 |
| 1887..... | 1352 | 196 | 1548 | 10.00 | 20.37 | 20.27 |
| 1888..... | 1426 | 191 | 1617 | 10.25 | 20.14 | 19.65 |
| 1889..... | 1489 | 211 | 1700 | 10.03 | 18.18 | 17.56 |
| 1890..... | 1972 | 259 | 2231 | 10.21 | 18.59 | 18.09 |
| 1891..... | 2120 | 301 | 2421 | 8.72 | 19.37 | 22.20 |
| 1892..... | 2177 | 279 | 2456 | 9.37 | 17.08 | 18.23 |
| 1893..... | 2315 | 413 | 2728 | 10.07 | 17.00 | 16.92 |
| 1894..... | 2155 | 359 | 2514 | 10.52 | 16.04 | 15.24 |
| 1895..... | 2169 | 294 | 2463 | 10.18 | 15.39 | 15.14 |
| 1896..... | 2310 | 357 | 2667 | 11.46 | 16.48 | 14.36 |

DEATHS FROM CONSUMPTION, PNEUMONIA AND BRONCHITIS, BY YEARS: 1858-1896.



PNEUMONIA.

Deaths as reported by months—Totals by years—Percentages of the mortality from all causes—Deaths per 10 000 of population—Annual death rates from all causes—For the years 1851 to 1896 inclusive.

| YEARS. | MONTHS. | | | | | | | | | | | | PNEUMONIA MORTALITY. | | Annual death rates from all causes per 1000 of population. | |
|-----------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|----------------------|---------------------------------|--|---------------------------|
| | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. | Percentages of total mortality. | | Per 10 000 of population. |
| 1851..... | | | | | | | 1 | 3 | 1 | | 1 | 2 | 8 | 0.86 | 2.35 | 36.60 |
| 1852..... | 1 | 6 | 9 | 4 | 3 | 1 | 3 | .... | 1 | 1 | | 1 | 30 | 1.66 | 7.75 | 46.70 |
| 1853..... | 2 | 2 | 5 | 5 | 2 | 1 | 1 | .... | 2 | 2 | 2 | 4 | 28 | 2.11 | 4.75 | 22.40 |
| 1854..... | 4 | 3 | 4 | 4 | 4 | 1 | 1 | 6 | 4 | 1 | | 3 | 35 | 0.83 | 5.31 | 64.00 |
| 1855..... | 5 | 4 | 8 | 6 | 3 | 3 | 3 | 1 | 1 | | 9 | 4 | 47 | 2.15 | 5.87 | 27.20 |
| 1856..... | 1 | 5 | 1 | 13 | 10 | 1 | 2 | 3 | 3 | 2 | 2 | 3 | 46 | 2.21 | 5.48 | 24.80 |
| 1857..... | 9 | 4 | 6 | 6 | 5 | 3 | .... | 4 | 1 | 2 | 4 | 6 | 50 | 2.07 | 5.70 | 27.55 |
| 1858..... | 12 | 12 | 8 | 2 | 5 | 8 | 9 | 1 | 5 | 1 | 10 | 4 | 77 | 3.46 | 8.55 | 24.72 |
| 1859..... | 1 | 7 | 11 | 6 | 7 | 2 | 3 | 4 | 2 | 2 | 2 | 6 | 53 | 2.64 | 5.70 | 21.30 |
| 1860..... | 5 | 4 | 1 | 9 | 3 | 6 | 3 | 2 | 4 | 2 | 3 | 6 | 48 | 2.12 | 4.40 | 20.70 |
| 1861..... | 9 | 5 | 12 | 2 | 7 | 5 | 7 | .... | 1 | | 2 | 5 | 55 | 2.41 | 4.58 | 18.90 |
| 1862..... | 15 | 6 | 6 | 11 | 6 | 7 | 6 | 12 | 2 | 3 | 2 | 12 | 88 | 3.10 | 6.42 | 20.51 |
| 1863..... | 9 | 11 | 18 | 13 | 10 | 8 | 8 | 8 | 7 | 7 | 15 | 12 | 126 | 3.24 | 8.40 | 25.80 |
| 1864..... | 18 | 16 | 18 | 16 | 15 | 14 | 6 | 1 | 13 | 14 | 10 | 22 | 163 | 3.66 | 9.62 | 26.26 |
| 1865..... | 8 | 15 | 24 | 28 | 7 | 5 | 4 | 10 | 2 | 7 | 17 | 23 | 150 | 4.10 | 8.40 | 22.50 |
| 1866..... | 15 | 18 | 20 | 25 | 16 | 11 | 14 | 15 | 9 | 9 | 15 | 20 | 187 | 3.15 | 9.33 | 32.20 |
| 1867..... | 11 | 20 | 13 | 22 | 17 | 3 | 11 | 4 | 8 | 11 | 19 | 32 | 171 | 3.68 | 7.60 | 21.10 |
| 1868..... | 49 | 58 | 28 | 26 | 19 | 27 | 24 | 11 | 14 | 18 | 24 | 43 | 341 | 5.70 | 13.55 | 23.70 |
| 1869..... | 35 | 42 | 34 | 34 | 21 | 27 | 19 | 10 | 12 | 24 | 34 | 21 | 313 | 4.82 | 11.18 | 23.10 |
| 1870..... | 31 | 34 | 48 | 56 | 26 | 13 | 8 | 14 | 17 | 10 | 19 | 38 | 314 | 4.29 | 10.24 | 23.88 |
| 1871..... | 42 | 48 | 49 | 49 | 43 | 26 | 21 | 13 | .... | 31 | 30 | 34 | 386 | 5.53 | 11.55 | 20.87 |
| 1872..... | 53 | 67 | 63 | 51 | 22 | 18 | 15 | 18 | 20 | 30 | 47 | 58 | 462 | 4.55 | 12.57 | 27.67 |
| 1873..... | 69 | 38 | 44 | 41 | 54 | 35 | 21 | 19 | 27 | 16 | 31 | 40 | 435 | 4.55 | 11.45 | 25.16 |
| 1874..... | 62 | 53 | 46 | 48 | 26 | 14 | 17 | 11 | 12 | 29 | 26 | 33 | 377 | 4.67 | 9.54 | 20.29 |
| 1875..... | 62 | 48 | 68 | 59 | 52 | 24 | 20 | 15 | 13 | 36 | 36 | 60 | 493 | 6.02 | 12.30 | 19.72 |
| 1876..... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... | 364 | 4.24 | 8.92 | 21.02 |
| 1877..... | 39 | 39 | 39 | 40 | 35 | 21 | 22 | 11 | 14 | 19 | 31 | 35 | 345 | 4.30 | 8.02 | 18.68 |
| 1878..... | 42 | 38 | 46 | 50 | 20 | 17 | 16 | 12 | 22 | 16 | 34 | 64 | 377 | 5.08 | 8.63 | 16.99 |
| 1879..... | 65 | 57 | 49 | 55 | 40 | 29 | 14 | 12 | 16 | 24 | 43 | 56 | 460 | 5.34 | 9.35 | 17.52 |
| 1880..... | 51 | 52 | 94 | 122 | 69 | 38 | 27 | 31 | 24 | 30 | 37 | 58 | 633 | 6.05 | 12.58 | 20.79 |
| 1881..... | 81 | 56 | 71 | 87 | 85 | 45 | 42 | 39 | 31 | 36 | 62 | 72 | 707 | 5.10 | 13.09 | 25.60 |
| 1882..... | 122 | 94 | 113 | 110 | 67 | 62 | 30 | 32 | 28 | 32 | 61 | 78 | 829 | 6.26 | 14.80 | 23.60 |
| 1883..... | 81 | 92 | 73 | 85 | 63 | 31 | 24 | 35 | 37 | 46 | 54 | 73 | 694 | 6.01 | 11.97 | 19.92 |
| 1884..... | 85 | 73 | 72 | 85 | 82 | 43 | 49 | 29 | 26 | 33 | 52 | 84 | 713 | 5.71 | 11.32 | 19.80 |
| 1885..... | 94 | 91 | 76 | 85 | 82 | 59 | 41 | 22 | 35 | 26 | 44 | 81 | 736 | 5.90 | 11.07 | 18.76 |
| 1886..... | 69 | 93 | 119 | 125 | 83 | 43 | 47 | 47 | 39 | 50 | 63 | 102 | 880 | 6.42 | 12.64 | 19.43 |
| 1887..... | 125 | 112 | 136 | 129 | 91 | 53 | 42 | 49 | 39 | 53 | 84 | 95 | 1008 | 6.54 | 13.26 | 20.27 |
| 1888..... | 164 | 152 | 153 | 131 | 92 | 68 | 34 | 26 | 40 | 69 | 62 | 114 | 1105 | 7.01 | 13.76 | 19.65 |
| 1889..... | 128 | 111 | 145 | 126 | 83 | 57 | 47 | 44 | 61 | 93 | 107 | 167 | 1170 | 6.90 | 12.51 | 17.56 |
| 1890..... | 518 | 295 | 172 | 283 | 166 | 78 | 41 | 59 | 65 | 85 | 123 | 188 | 2073 | 9.48 | 17.15 | 18.09 |
| 1891..... | 280 | 233 | 722 | 548 | 259 | 112 | 87 | 51 | 65 | 112 | 150 | 279 | 2898 | 10.44 | 23.18 | 22.20 |
| 1892..... | 407 | 362 | 276 | 241 | 196 | 128 | 83 | 69 | 121 | 129 | 171 | 214 | 2397 | 9.14 | 16.67 | 18.23 |
| 1893..... | 325 | 254 | 308 | 365 | 265 | 141 | 79 | 67 | 61 | 118 | 224 | 250 | 2457 | 9.07 | 15.37 | 16.92 |
| 1894..... | 171 | 118 | 147 | 230 | 187 | 141 | 71 | 68 | 64 | 86 | 129 | 108 | 1520 | 6.36 | 9.69 | 15.24 |
| 1895..... | 277 | 444 | 337 | 319 | 210 | 107 | 73 | 79 | 68 | 140 | 158 | 147 | 2359 | 9.75 | 14.74 | 15.14 |
| 1896..... | 232 | 267 | 260 | 315 | 168 | 111 | 95 | 59 | 78 | 128 | 165 | 263 | 2141 | 9.23 | 13.22 | 14.36 |

BRONCHITIS.

Deaths as reported by months—Totals by years—Percentages of the mortality from all causes—Deaths per 10 000 of population—Annual death rates from all causes—For the years 1851 to 1896 inclusive.

| YEARS. | MONTHS. | | | | | | | | | | | | | BRONCHITIS MORTALITY. | | Annual death rates from all causes per 100 of population. |
|--------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|---------------------------------|---------------------------|---|
| | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. | Percentages of total mortality. | Per 10 000 of population. | |
| 1851 | | | | | | | 1 | | | | 1 | | 2 | 0.22 | 0.59 | 36.60 |
| 1852 | | | | | | | | | | | | | 1 | 0.05 | 0.26 | 46.70 |
| 1853 | | | 1 | | | | | | | | | | | | | 22.40 |
| 1854 | | | | 1 | | | | | | | 1 | 3 | 5 | 0.12 | 0.76 | 64.00 |
| 1855 | | | | | 1 | | | | | | | | 1 | 0.05 | 0.12 | 27.20 |
| 1856 | | | | 1 | | 1 | | | | | 1 | | 2 | 0.10 | 0.24 | 24.80 |
| 1857 | | | | | | | | 1 | | | | | 1 | 0.04 | 0.11 | 27.55 |
| 1858 | 1 | | | | | | | | | | | | 1 | 0.04 | 0.12 | 24.72 |
| 1859 | | | | | | | | | | | | | | | | 21.30 |
| 1860 | | | | | | | | | | | | | | | | 20.70 |
| 1861 | | | | | | | | | | | | | | | | 18.90 |
| 1862 | | | | | | | | 1 | | | | | 1 | 0.04 | 0.07 | 20.51 |
| 1863 | | | | | | | | | | 1 | 1 | | 2 | 0.05 | 0.13 | 25.80 |
| 1864 | 1 | 1 | | | | | | | | 1 | | | 3 | 0.07 | 0.19 | 26.26 |
| 1865 | | | 1 | | | | | | | | | | 1 | 0.03 | 0.06 | 22.50 |
| 1866 | 2 | | | 1 | 1 | 1 | 1 | 1 | | 1 | | 1 | 9 | 0.15 | 0.45 | 32.20 |
| 1867 | 1 | 1 | 1 | 1 | | | 3 | 2 | 1 | 2 | 8 | 4 | 24 | 0.52 | 1.07 | 21.10 |
| 1868 | 11 | 12 | 9 | 4 | 8 | 3 | | 3 | 3 | 8 | 6 | 9 | 76 | 1.27 | 3.02 | 23.70 |
| 1869 | 8 | 6 | 8 | 3 | 4 | 5 | 3 | | 6 | 2 | 7 | 11 | 63 | 0.97 | 2.25 | 23.10 |
| 1870 | 9 | 15 | 20 | 20 | 7 | 7 | 4 | 9 | 6 | 7 | 9 | 13 | 126 | 1.72 | 4.10 | 23.88 |
| 1871 | 11 | 15 | 14 | 9 | 17 | 12 | 5 | | | 7 | 5 | 9 | 104 | 1.49 | 3.11 | 20.87 |
| 1872 | 26 | 23 | 29 | 19 | 13 | 6 | 10 | 10 | 5 | 6 | 11 | 20 | 178 | 1.75 | 4.84 | 27.67 |
| 1873 | 29 | 21 | 26 | 16 | 28 | 11 | 11 | 11 | 12 | 10 | 15 | 25 | 215 | 2.25 | 5.66 | 25.16 |
| 1874 | 34 | 22 | 18 | 12 | 6 | 7 | 6 | 4 | 8 | 11 | 12 | 14 | 154 | 1.91 | 3.89 | 20.29 |
| 1875 | 23 | 19 | 17 | 27 | 18 | 12 | 13 | 11 | 3 | 5 | 15 | 32 | 195 | 2.47 | 4.86 | 19.72 |
| 1876 | | | | | | | | | | | | | 189 | 2.20 | 4.63 | 21.02 |
| 1877 | 17 | 17 | 30 | 21 | 18 | 7 | 6 | 4 | 11 | 11 | 18 | 22 | 182 | 2.27 | 4.23 | 18.68 |
| 1878 | 41 | 31 | 36 | 28 | 26 | 13 | 12 | 11 | 12 | 10 | 37 | 32 | 289 | 3.89 | 6.61 | 16.99 |
| 1879 | 46 | 33 | 26 | 12 | 11 | 14 | 4 | 9 | 11 | 15 | 29 | 22 | 232 | 2.69 | 4.72 | 17.52 |
| 1880 | 17 | 26 | 52 | 67 | 38 | 20 | 12 | 17 | 19 | 17 | 27 | 36 | 348 | 3.33 | 6.91 | 20.79 |
| 1881 | 53 | 47 | 41 | 58 | 28 | 31 | 37 | 20 | 18 | 25 | 31 | 43 | 432 | 3.11 | 8.00 | 25.60 |
| 1882 | 77 | 54 | 60 | 40 | 45 | 44 | 29 | 23 | 33 | 22 | 39 | 36 | 502 | 3.79 | 8.97 | 23.60 |
| 1883 | 55 | 40 | 52 | 53 | 43 | 24 | 20 | 20 | 30 | 35 | 25 | 46 | 443 | 3.83 | 7.64 | 19.92 |
| 1884 | 54 | 61 | 62 | 46 | 55 | 46 | 34 | 24 | 21 | 27 | 33 | 86 | 549 | 4.40 | 8.71 | 19.80 |
| 1885 | 88 | 88 | 70 | 47 | 60 | 31 | 26 | 26 | 29 | 35 | 22 | 35 | 557 | 4.47 | 8.38 | 18.76 |
| 1886 | 58 | 71 | 122 | 129 | 62 | 53 | 29 | 25 | 29 | 39 | 51 | 62 | 730 | 5.33 | 10.37 | 19.43 |
| 1887 | 104 | 99 | 104 | 95 | 66 | 52 | 26 | 24 | 33 | 39 | 50 | 62 | 754 | 4.24 | 9.92 | 20.27 |
| 1888 | 144 | 101 | 104 | 89 | 50 | 50 | 39 | 36 | 38 | 43 | 34 | 95 | 823 | 5.22 | 10.24 | 19.65 |
| 1889 | 115 | 90 | 84 | 79 | 69 | 55 | 43 | 31 | 25 | 59 | 61 | 105 | 816 | 4.82 | 8.73 | 17.56 |
| 1890 | 232 | 148 | 109 | 162 | 88 | 55 | 33 | 43 | 43 | 75 | 71 | 130 | 1189 | 5.44 | 9.83 | 18.09 |
| 1891 | 181 | 152 | 291 | 274 | 105 | 72 | 48 | 45 | 36 | 71 | 102 | 118 | 1495 | 5.39 | 11.96 | 22.20 |
| 1892 | 198 | 196 | 172 | 121 | 105 | 63 | 46 | 70 | 62 | 67 | 82 | 121 | 1303 | 4.97 | 9.06 | 18.23 |
| 1893 | 186 | 189 | 159 | 177 | 131 | 90 | 55 | 54 | 57 | 59 | 103 | 135 | 1395 | 5.11 | 8.72 | 16.92 |
| 1894 | 89 | 74 | 87 | 171 | 154 | 109 | 46 | 52 | 62 | 92 | 82 | 167 | 1185 | 4.96 | 7.56 | 15.24 |
| 1895 | 170 | 226 | 156 | 97 | 89 | 53 | 49 | 41 | 38 | 56 | 78 | 80 | 1133 | 4.68 | 7.08 | 15.14 |
| 1896 | 87 | 125 | 152 | 190 | 124 | 66 | 49 | 42 | 52 | 79 | 81 | 118 | 1165 | 5.02 | 7.19 | 14.36 |

DIPHTHERIA.

Deaths as reported by months—Totals by years—Percentages of the mortality from all causes—Deaths per 10 000 of population—Annual death rates from all causes—For the years 1859 to 1896 inclusive.

| YEARS. | MONTHS. | | | | | | | | | | | | DIPHTHERIA MORTALITY. | | Annual death rates from all causes per 1000 of population. | |
|--------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|-----------------------|---------------------------------|--|---------------------------|
| | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. | Percentages of total mortality. | | Per 10 000 of population. |
| 1859 | 4 | 6 | 26 | 3 | 1 | 5 | 21 | 10 | 10 | 16 | 22 | 30 | 154 | 0.05 | 0.11 | 21.30 |
| 1860 | 29 | 16 | 17 | 12 | 9 | 4 | 4 | 2 | 1 | 2 | 9 | 7 | 112 | 6.81 | 14.09 | 20.70 |
| 1861 | 6 | 5 | 8 | 3 | 3 | 8 | 2 | 8 | 14 | 7 | 2 | 8 | 74 | 4.91 | 9.33 | 18.90 |
| 1862 | 9 | 5 | 10 | 11 | 9 | 10 | 8 | 2 | 13 | 22 | 17 | 21 | 137 | 2.61 | 5.40 | 20.51 |
| 1863 | 16 | 13 | 19 | 17 | 6 | 3 | 3 | 5 | 8 | 10 | 7 | 8 | 115 | 3.53 | 9.13 | 25.80 |
| 1864 | 4 | 4 | 15 | 4 | 1 | 4 | 7 | 9 | 11 | 36 | 48 | 26 | 169 | 2.59 | 6.79 | 26.26 |
| 1865 | 31 | 11 | 14 | 5 | 6 | 4 | 6 | 9 | 9 | 12 | 12 | 15 | 134 | 4.61 | 9.47 | 22.50 |
| 1866 | 8 | 8 | 5 | 8 | 7 | 1 | 3 | 4 | 6 | 10 | 9 | 11 | 78 | 1.68 | 3.47 | 21.10 |
| 1867 | 21 | 6 | 4 | 6 | 4 | 1 | 2 | 2 | 13 | 9 | 10 | 9 | 87 | 1.45 | 3.45 | 23.70 |
| 1868 | 2 | 10 | 4 | 6 | 2 | 2 | 11 | 11 | 25 | 29 | 13 | 15 | 130 | 2.00 | 4.64 | 23.10 |
| 1869 | 15 | 15 | 11 | 9 | 7 | 7 | 9 | 17 | 20 | 20 | 19 | 15 | 164 | 2.24 | 5.34 | 23.88 |
| 1870 | 14 | 10 | 8 | 7 | 10 | 6 | 5 | 15 | 17 | 22 | 7 | 11 | 148 | 1.38 | 2.90 | 20.87 |
| 1871 | 18 | 7 | 9 | 13 | 12 | 5 | 15 | 17 | 22 | 7 | 11 | 148 | 1.46 | 4.03 | 27.67 | |
| 1872 | 14 | 7 | 5 | 5 | 8 | 17 | 6 | 5 | 7 | 6 | 6 | 6 | 92 | 0.96 | 2.42 | 25.16 |
| 1873 | 5 | 4 | 6 | 7 | 4 | 2 | 4 | 10 | 4 | 10 | 15 | 7 | 78 | 0.97 | 1.97 | 20.29 |
| 1874 | 10 | 7 | 9 | 6 | 7 | 7 | 7 | 10 | 7 | 12 | 23 | 20 | 125 | 1.58 | 3.12 | 19.72 |
| 1875 | 56 | 31 | 21 | 17 | 18 | 13 | 16 | 15 | 26 | 46 | 43 | 31 | 333 | 5.41 | 11.13 | 21.02 |
| 1876 | 25 | 18 | 16 | 14 | 9 | 7 | 10 | 13 | 30 | 53 | 54 | 45 | 294 | 4.15 | 7.74 | 18.68 |
| 1877 | 42 | 30 | 52 | 44 | 29 | 26 | 26 | 51 | 64 | 67 | 78 | 95 | 604 | 3.96 | 6.73 | 16.99 |
| 1878 | 107 | 84 | 72 | 59 | 44 | 52 | 79 | 53 | 85 | 92 | 94 | 109 | 930 | 7.01 | 12.29 | 17.52 |
| 1879 | 86 | 44 | 40 | 40 | 37 | 45 | 22 | 49 | 56 | 71 | 70 | 49 | 609 | 8.89 | 18.48 | 20.79 |
| 1880 | 46 | 29 | 46 | 43 | 62 | 42 | 28 | 34 | 34 | 48 | 53 | 56 | 521 | 4.39 | 11.28 | 25.60 |
| 1881 | 73 | 34 | 49 | 48 | 37 | 34 | 37 | 45 | 45 | 56 | 60 | 74 | 592 | 3.94 | 9.48 | 23.60 |
| 1882 | 42 | 41 | 29 | 37 | 59 | 35 | 31 | 35 | 44 | 70 | 107 | 119 | 649 | 5.12 | 10.21 | 19.92 |
| 1883 | 71 | 54 | 50 | 62 | 48 | 36 | 31 | 45 | 77 | 81 | 79 | 72 | 706 | 5.20 | 10.30 | 19.80 |
| 1884 | 78 | 55 | 52 | 66 | 70 | 78 | 56 | 74 | 60 | 105 | 139 | 111 | 944 | 5.66 | 10.62 | 18.76 |
| 1885 | 113 | 72 | 75 | 56 | 75 | 65 | 43 | 72 | 90 | 114 | 115 | 112 | 1002 | 6.89 | 13.41 | 19.43 |
| 1886 | 96 | 70 | 63 | 55 | 62 | 62 | 40 | 48 | 70 | 89 | 105 | 98 | 858 | 6.50 | 13.18 | 20.27 |
| 1887 | 109 | 82 | 104 | 91 | 70 | 85 | 54 | 72 | 77 | 132 | 125 | 125 | 1126 | 5.44 | 10.68 | 19.65 |
| 1888 | 117 | 102 | 95 | 84 | 59 | 40 | 50 | 66 | 60 | 78 | 90 | 881 | 6.65 | 12.04 | 17.56 | |
| 1889 | 90 | 88 | 80 | 51 | 50 | 44 | 39 | 72 | 76 | 124 | 123 | 121 | 958 | 4.03 | 7.28 | 18.09 |
| 1890 | 117 | 80 | 91 | 62 | 70 | 51 | 32 | 49 | 57 | 118 | 136 | 151 | 1014 | 3.45 | 7.67 | 22.20 |
| 1891 | 113 | 95 | 110 | 67 | 76 | 71 | 58 | 55 | 57 | 88 | 84 | 101 | 975 | 3.87 | 7.05 | 18.23 |
| 1892 | 105 | 70 | 79 | 58 | 62 | 68 | 61 | 81 | 109 | 169 | 214 | 217 | 1293 | 3.60 | 6.09 | 16.92 |
| 1893 | 180 | 102 | 76 | 63 | 46 | 71 | 69 | 97 | 102 | 240 | 201 | 173 | 1420 | 5.41 | 8.24 | 15.24 |
| 1894 | 118 | 92 | 75 | 74 | 49 | 50 | 54 | 50 | 93 | 116 | 87 | 98 | 956 | 5.83 | 8.87 | 15.14 |
| 1895 | | | | | | | | | | | | | | 4.12 | 5.90 | 14.36 |
| 1896 | | | | | | | | | | | | | | | | |

a) Including 80 per cent. of 565 deaths reported as from "Croup."

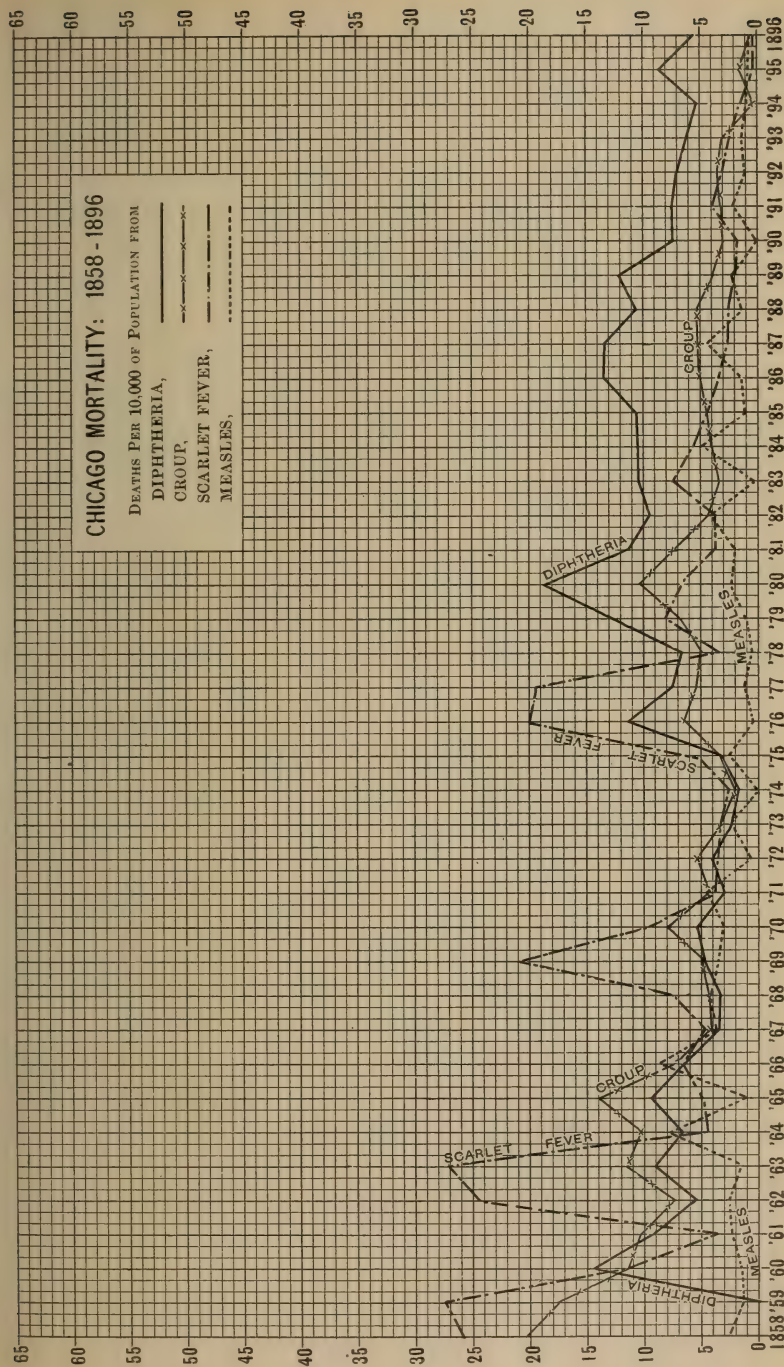
CROUP.

Deaths as reported by months—Totals by years—Percentages of the mortality from all causes—Deaths per 10 000 of population—Annual death rates from all causes—For the years 1851 to 1896 inclusive.

| YEARS. | MONTHS. | | | | | | | | | | | | | CROUP MORTALITY. | | Annual death rates from all causes per 100 of population. |
|----------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|------------------------------------|------------------------------|---|
| | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. | Percentages of deaths under 5 yrs. | Percentages of total deaths. | |
| 1851 | | | | | | 1 | | 2 | 5 | 1 | 3 | 7 | 12 | 3.31 | 1.29 | 36.60 |
| 1852 | 3 | 3 | 1 | 4 | 2 | 5 | 1 | 1 | | 5 | 3 | 3 | 31 | 5.52 | 1.71 | 46.70 |
| 1853 | 3 | 3 | 1 | 1 | | 3 | 4 | 8 | 1 | 3 | 2 | 1 | 30 | 5.11 | 2.26 | 22.40 |
| 1854 | 3 | 5 | 11 | 14 | 3 | 4 | 1 | | | 6 | 4 | 3 | 54 | 4.21 | 1.30 | 64.00 |
| 1855 | 10 | 9 | 4 | 2 | 1 | 3 | 1 | 1 | 6 | 6 | 2 | 4 | 49 | 5.54 | 2.24 | 27.20 |
| 1856 | 5 | | | | 1 | 1 | | | 3 | 4 | 8 | 7 | 29 | 2.90 | 1.39 | 24.88 |
| 1857 | 2 | 3 | 17 | 39 | 11 | 19 | 14 | 12 | 10 | 9 | 18 | 8 | 162 | 12.75 | 6.71 | 27.55 |
| 1858 | 26 | 29 | 18 | 13 | 5 | 18 | 1 | 22 | 24 | 12 | 10 | 10 | 188 | 16.00 | 8.44 | 24.72 |
| 1859 | 11 | 6 | 7 | 13 | 12 | 13 | 5 | 9 | 19 | 18 | 20 | 28 | 161 | 15.48 | 8.01 | 21.30 |
| 1860 | 12 | 22 | 8 | 6 | 3 | 10 | 5 | 12 | 16 | 10 | 10 | 11 | 125 | 10.88 | 5.52 | 20.70 |
| 1861 | 14 | 7 | 18 | 6 | 7 | 6 | 6 | 13 | 10 | | 15 | 22 | 124 | 10.91 | 5.44 | 18.90 |
| 1862 | | 27 | 10 | 17 | 3 | 7 | 13 | 4 | 8 | 4 | 7 | 1 | 101 | 7.12 | 3.56 | 20.51 |
| 1863 | 24 | 9 | 22 | 19 | 9 | 14 | 16 | 13 | 12 | 13 | 8 | 18 | 177 | 9.89 | 4.55 | 25.80 |
| 1864 | 20 | 14 | 12 | 12 | 15 | 17 | 22 | 5 | 17 | 18 | 14 | 14 | 180 | 8.64 | 4.04 | 26.26 |
| 1865 | 18 | 19 | 23 | 12 | 17 | 14 | 3 | 8 | 14 | 40 | 40 | 43 | 251 | 12.99 | 6.85 | 22.50 |
| 1866 | 29 | 18 | 12 | 16 | 9 | 9 | 15 | 9 | 6 | 8 | 11 | 7 | 149 | 5.13 | 2.51 | 32.20 |
| 1867 | 11 | 8 | 8 | 10 | 3 | 2 | | | 2 | 11 | 19 | 24 | 98 | 3.92 | 2.10 | 21.10 |
| 1868 | 9 | 12 | 11 | 6 | 6 | 9 | 3 | 6 | 11 | 18 | 10 | 13 | 114 | 4.50 | 1.90 | 23.70 |
| 1869 | 13 | 5 | 5 | 6 | 5 | 2 | 5 | 10 | 13 | 28 | 18 | 30 | 140 | 4.77 | 2.15 | 23.10 |
| 1870 | 27 | 20 | 16 | 7 | 9 | 12 | 5 | 10 | 21 | 50 | 46 | 27 | 250 | 5.43 | 3.41 | 23.88 |
| 1871 | 27 | 18 | 15 | 9 | 8 | 4 | 6 | | | 22 | 16 | 14 | 139 | 3.38 | 1.99 | 20.87 |
| 1872 | 14 | 10 | 14 | 9 | 7 | 8 | 7 | 12 | 24 | 28 | 29 | 42 | 204 | 3.45 | 2.00 | 27.67 |
| 1873 | 19 | 7 | 20 | 14 | 10 | 5 | 5 | 2 | 13 | 15 | 14 | 9 | 133 | 2.34 | 1.39 | 25.16 |
| 1874 | 17 | 4 | 9 | 1 | 8 | 4 | 3 | 1 | 5 | 11 | 9 | 17 | 89 | 1.81 | 1.10 | 20.29 |
| 1875 | 11 | 9 | 7 | 13 | 11 | 6 | 14 | 4 | 8 | 9 | 21 | 26 | 139 | 2.93 | 1.75 | 19.72 |
| 1876 | | | | | | | | | | | | | 276 | 5.64 | 3.21 | 21.02 |
| 1877 | 30 | 23 | 12 | 19 | 16 | 4 | 4 | 12 | 17 | 36 | 31 | 32 | 236 | 5.23 | 2.94 | 18.68 |
| 1878 | 18 | 24 | 11 | 20 | 7 | 7 | 1 | 4 | 21 | 44 | 35 | 32 | 224 | 5.57 | 3.01 | 16.99 |
| 1879 | 26 | 14 | 22 | 15 | 15 | 8 | 8 | 26 | 28 | 57 | 62 | 83 | 364 | 8.19 | 4.22 | 17.52 |
| 1880 | 49 | 46 | 44 | 41 | 34 | 27 | 11 | 24 | 37 | 73 | 82 | 65 | 533 | 9.45 | 5.09 | 20.79 |
| 1881 | 57 | 41 | 30 | 25 | 36 | 21 | 16 | 20 | 30 | 43 | 39 | 42 | 400 | 5.42 | 2.88 | 25.60 |
| 1882 | 24 | 32 | 37 | 16 | 26 | 11 | 8 | 8 | 11 | 16 | 22 | 21 | 232 | 3.49 | 1.75 | 23.60 |
| 1883 | 31 | 19 | 17 | 17 | 15 | 15 | 7 | 6 | 17 | 25 | 28 | 28 | 225 | 3.82 | 1.08 | 19.92 |
| 1884 | 24 | 10 | 24 | 11 | 13 | 10 | 12 | 12 | 9 | 34 | 57 | 40 | 256 | 3.84 | 2.05 | 19.80 |
| 1885 | 42 | 22 | 19 | 32 | 15 | 13 | 13 | 15 | 26 | 30 | 39 | 40 | 306 | 4.94 | 2.45 | 18.76 |
| 1886 | 36 | 22 | 28 | 24 | 26 | 8 | 10 | 18 | 32 | 46 | 68 | 41 | 359 | 5.30 | 2.62 | 19.43 |
| 1887 | 46 | 41 | 38 | 35 | 28 | 20 | 2 | 19 | 35 | 50 | 50 | 39 | 403 | 5.32 | 2.61 | 20.27 |
| 1888 | 78 | 51 | 56 | 52 | 25 | 21 | 19 | 17 | 28 | 32 | 31 | 29 | 439 | 5.82 | 2.78 | 19.65 |
| 1889 | 29 | 25 | 31 | 18 | 31 | 16 | 11 | 18 | 27 | 67 | 62 | 48 | 383 | 4.66 | 2.85 | 17.56 |
| 1890 | 52 | 29 | 34 | 36 | 25 | 13 | 12 | 17 | 35 | 32 | 46 | 49 | 380 | 3.81 | 1.73 | 18.09 |
| 1891 | 43 | 29 | 38 | 24 | 38 | 25 | 19 | 21 | 31 | 30 | 59 | 43 | 400 | 3.12 | 1.44 | 22.20 |
| 1892 | 44 | 44 | 50 | 40 | 32 | 9 | 11 | 28 | 53 | 74 | 74 | 75 | 534 | 4.57 | 2.03 | 18.23 |
| 1893 | 77 | 37 | 33 | 42 | 38 | 23 | 16 | 34 | 35 | 59 | 55 | 43 | 492 | 3.97 | 1.81 | 16.92 |
| 1894 [a] | 8 | 6 | 8 | 6 | 4 | 6 | 5 | 7 | 8 | 16 | 18 | 21 | 113 | 1.02 | 0.48 | 15.24 |
| 1895 | 31 | 24 | 23 | 21 | 9 | 9 | 18 | 17 | 32 | 14 | 11 | 3 | 212 | 2.04 | 0.87 | 15.14 |
| 1896 | 7 | 24 | 17 | 11 | 10 | 7 | 8 | 3 | 13 | 16 | 9 | 17 | 142 | 1.46 | 0.88 | 14.36 |

a) Eighty per cent. of the deaths reported as from "Croup" in 1894 is deducted, and has been added to deaths from *Diphtheria* in that year.

DEATHS FROM DIPHTHERIA, CROUP, SCARLET FEVER AND MEASLES, BY YEARS: 1858-1896.



SCARLET FEVER.

Deaths as reported by months—Totals by years—Percentages of the mortality from all causes—Deaths per 10 000 of population—Annual death rates from all causes—For the years 1851 to 1896 inclusive.

| YEARS. | MONTHS. | | | | | | | | | | | | SCARLET FEVER MORTALITY. | | Annual death rates from all causes per 1000 of population. | | |
|--------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------------------------|---------------------------------|--|---------------------------|-------|
| | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. | Percentages of total mortality. | | Per 10 000 of population. | |
| 1851 | | | | | | 4 | 4 | 2 | | 1 | 3 | 3 | 17 | 1.83 | 5.00 | 36.60 | |
| 1852 | | | 4 | 7 | 5 | 2 | 1 | 2 | 4 | 3 | 5 | 11 | 46 | 2.54 | 11.89 | 46.70 | |
| 1853 | 6 | 9 | 11 | 2 | 1 | | | 3 | 2 | | | 1 | 36 | 2.72 | 6.10 | 22.40 | |
| 1854 | 2 | 1 | 2 | | 1 | 4 | 1 | 1 | 4 | | 1 | 7 | 24 | 0.57 | 3.64 | 64.00 | |
| 1855 | 1 | 3 | 1 | | | | | | | | | | 5 | 0.23 | 0.62 | 27.20 | |
| 1856 | 4 | | | 1 | 1 | | | 1 | | 1 | 3 | 4 | 15 | 0.72 | 1.79 | 24.80 | |
| 1857 | 2 | 19 | 9 | 11 | 7 | 7 | 5 | | 2 | 5 | 3 | 5 | 75 | 3.11 | 8.56 | 27.55 | |
| 1858 | 4 | 4 | 4 | 21 | 22 | 34 | 16 | 23 | 23 | 11 | 7 | 30 | 38 | 233 | 10.47 | 25.90 | 24.72 |
| 1859 | 29 | 40 | 45 | 24 | 10 | 15 | 14 | 6 | 16 | 31 | 8 | 15 | 253 | 12.60 | 27.20 | 21.30 | |
| 1860 | 22 | 11 | 19 | 15 | 19 | 5 | 7 | 8 | 7 | 5 | 3 | 4 | 125 | 5.52 | 11.47 | 20.70 | |
| 1861 | 1 | 3 | | | | 1 | 3 | 2 | 3 | 2 | 2 | 24 | 45 | 1.97 | 3.75 | 18.90 | |
| 1862 | 6 | 13 | 17 | 11 | 16 | 22 | 43 | 16 | 35 | 45 | 48 | 63 | 335 | 11.82 | 24.45 | 20.51 | |
| 1863 | 107 | 60 | 54 | 50 | 25 | 15 | 28 | 10 | 26 | 12 | 9 | 9 | 405 | 10.42 | 27.00 | 25.80 | |
| 1864 | 7 | 8 | 5 | 8 | 5 | 7 | 4 | 4 | 1 | 3 | 5 | 13 | 70 | 1.57 | 4.14 | 26.26 | |
| 1865 | 8 | 8 | 10 | 6 | 8 | 3 | 6 | 11 | 12 | 7 | 2 | 8 | 89 | 2.43 | 4.99 | 22.50 | |
| 1866 | 6 | 12 | 12 | 6 | 7 | 14 | 14 | 17 | 12 | 8 | 6 | 13 | 127 | 2.14 | 6.35 | 32.20 | |
| 1867 | 21 | 14 | 10 | 9 | 7 | 8 | 1 | 8 | 3 | 3 | 3 | 14 | 101 | 2.17 | 4.49 | 21.10 | |
| 1868 | 7 | 5 | 7 | 3 | 13 | 8 | 12 | 17 | 10 | 27 | 35 | 38 | 182 | 3.04 | 7.22 | 23.70 | |
| 1869 | 47 | 43 | 28 | 46 | 28 | 51 | 70 | 56 | 30 | 48 | 66 | 60 | 573 | 8.83 | 20.46 | 23.10 | |
| 1870 | 57 | 39 | 38 | 30 | 27 | 37 | 20 | 19 | 7 | 11 | 10 | 10 | 305 | 4.17 | 9.95 | 23.88 | |
| 1871 | 14 | 9 | 9 | 7 | 11 | 7 | 9 | | | 16 | 17 | 25 | 124 | 1.78 | 3.70 | 20.87 | |
| 1872 | 18 | 13 | 11 | 13 | 12 | 6 | 9 | 8 | 4 | 8 | 5 | 21 | 128 | 1.26 | 3.48 | 27.67 | |
| 1873 | 14 | 7 | 14 | 13 | 11 | 11 | 15 | 8 | 10 | 4 | 4 | 4 | 115 | 1.20 | 3.03 | 25.16 | |
| 1874 | 7 | 2 | 4 | 5 | 6 | 14 | 12 | 11 | 16 | 6 | 12 | 10 | 105 | 1.30 | 2.66 | 20.29 | |
| 1875 | 14 | 7 | 12 | 17 | 21 | 15 | 11 | 11 | 20 | 17 | 17 | 44 | 206 | 2.59 | 5.15 | 19.72 | |
| 1876 | | | | | | | | | | | | | 811 | 9.46 | 19.93 | 21.02 | |
| 1877 | 153 | 114 | 92 | 74 | 82 | 83 | 57 | 44 | 37 | 29 | 31 | 23 | 819 | 10.20 | 19.05 | 18.68 | |
| 1878 | 16 | 11 | 7 | 8 | 11 | 6 | 2 | 13 | 11 | 15 | 14 | 19 | 133 | 1.79 | 3.04 | 16.99 | |
| 1879 | 20 | 16 | 31 | 30 | 32 | 16 | 31 | 35 | 33 | 41 | 61 | 43 | 389 | 4.52 | 7.92 | 17.52 | |
| 1880 | 50 | 37 | 28 | 26 | 27 | 30 | 27 | 30 | 32 | 24 | 13 | 15 | 339 | 3.25 | 6.74 | 20.79 | |
| 1881 | 25 | 22 | 7 | 23 | 22 | 15 | 19 | 14 | 8 | 12 | 12 | 12 | 187 | 1.35 | 3.46 | 25.60 | |
| 1882 | 30 | 18 | 11 | 14 | 12 | 11 | 2 | 14 | 4 | 18 | 37 | 29 | 200 | 1.51 | 3.57 | 23.60 | |
| 1883 | 39 | 22 | 35 | 36 | 35 | 30 | 31 | 36 | 36 | 30 | 23 | 47 | 400 | 3.46 | 7.07 | 19.92 | |
| 1884 | 42 | 26 | 13 | 18 | 19 | 23 | 22 | 48 | 36 | 39 | 34 | 34 | 354 | 2.48 | 5.62 | 19.80 | |
| 1885 | 42 | 18 | 15 | 27 | 20 | 23 | 12 | 13 | 20 | 27 | 35 | 27 | 279 | 2.24 | 4.19 | 18.76 | |
| 1886 | 22 | 29 | 19 | 20 | 19 | 25 | 13 | 21 | 6 | 15 | 14 | 17 | 220 | 1.61 | 3.12 | 19.43 | |
| 1887 | 23 | 23 | 20 | 13 | 8 | 18 | 15 | 23 | 19 | 7 | 14 | 7 | 190 | 1.23 | 2.50 | 20.27 | |
| 1888 | 16 | 15 | 10 | 14 | 20 | 16 | 18 | 6 | 17 | 18 | 14 | 20 | 184 | 1.17 | 2.29 | 19.65 | |
| 1889 | 22 | 12 | 17 | 24 | 15 | 16 | 14 | 12 | 13 | 13 | 11 | 16 | 185 | 1.09 | 1.98 | 17.56 | |
| 1890 | 17 | 19 | 38 | 12 | 15 | 15 | 7 | 9 | 14 | 11 | 13 | 23 | 193 | 0.88 | 1.61 | 18.09 | |
| 1891 | 40 | 58 | 62 | 39 | 39 | 30 | 21 | 26 | 34 | 43 | 50 | 57 | 499 | 1.80 | 3.91 | 22.20 | |
| 1892 | 64 | 46 | 42 | 42 | 35 | 22 | 18 | 17 | 18 | 21 | 27 | 30 | 382 | 1.46 | 2.65 | 18.23 | |
| 1893 | 47 | 35 | 47 | 42 | 25 | 18 | 22 | 9 | 17 | 21 | 24 | 22 | 329 | 1.21 | 2.06 | 16.92 | |
| 1894 | 30 | 23 | 16 | 18 | 13 | 16 | 17 | 19 | 5 | 8 | 10 | 15 | 190 | 0.80 | 1.21 | 15.24 | |
| 1895 | 15 | 11 | 2 | 9 | 7 | 5 | 4 | 8 | 7 | 1 | 3 | 5 | 77 | 0.32 | 0.48 | 15.14 | |
| 1896 | 8 | 3 | 5 | 2 | 5 | 2 | 5 | 3 | 5 | 4 | 5 | 7 | 54 | 0.23 | 0.33 | 14.36 | |

MEASLES.

Deaths as reported by months—Totals by years—Percentages of the mortality from all causes—Deaths per 10 000 of population—Annual death rates from all causes—For the years 1851 to 1896 inclusive.

| YEARS. | MONTHS. | | | | | | | | | | | | | MEASLES MORTALITY. | | Annual death rates from all causes per 100 of population. |
|-----------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------|---------------------------------|---------------------------|---|
| | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. | Percentages of total mortality. | Per 10 000 of population. | |
| 1851..... | | | | | | | 1 | | | | | 1 | 2 | 0.22 | 0.60 | 36.60 |
| 1852..... | 2 | | 1 | 2 | 1 | 2 | 6 | 2 | 1 | | | | 17 | 0.94 | 4.65 | 46.70 |
| 1853..... | | | | 1 | 4 | 6 | 6 | 8 | | 2 | 2 | | 31 | 2.34 | 5.25 | 22.40 |
| 1854..... | 5 | 1 | 1 | 1 | 3 | 15 | 7 | 9 | 4 | | | | 46 | 1.09 | 7.00 | 64.00 |
| 1855..... | 2 | | 2 | | 1 | 1 | 2 | | | 1 | | | 9 | 0.41 | 1.12 | 27.20 |
| 1856..... | | | | | 3 | 3 | 6 | 1 | 1 | | | 5 | 16 | 0.77 | 1.90 | 24.80 |
| 1857..... | | 3 | | | 5 | 7 | 17 | 3 | 4 | | | | 39 | 1.62 | 4.45 | 27.55 |
| 1858..... | | | | 2 | 1 | 4 | 4 | 7 | 1 | | 3 | | 22 | 0.99 | 2.44 | 24.72 |
| 1859..... | | | | | 3 | 2 | 4 | 1 | | | | | 10 | 0.50 | 1.08 | 21.30 |
| 1860..... | | | | 1 | 1 | 1 | 6 | 4 | | | 1 | 1 | 15 | 0.66 | 1.37 | 20.70 |
| 1861..... | | | 3 | | 5 | 2 | 2 | 3 | 4 | | | 7 | 26 | 1.14 | 2.17 | 18.90 |
| 1862..... | 9 | 4 | | 5 | 4 | 3 | 7 | 3 | 1 | | 1 | 1 | 38 | 1.34 | 2.77 | 20.51 |
| 1863..... | | 2 | 2 | 7 | 3 | 2 | | | | 2 | 4 | 6 | 28 | 0.99 | 1.87 | 25.80 |
| 1864..... | 6 | 2 | 21 | 24 | 34 | 24 | 17 | 6 | 1 | | | | 135 | 3.03 | 7.99 | 26.26 |
| 1865..... | | 2 | 1 | 8 | 2 | 1 | 5 | 1 | | | | | 20 | 0.54 | 1.12 | 22.50 |
| 1866..... | | | 2 | 4 | 7 | 18 | 68 | 47 | 14 | 6 | 1 | | 166 | 2.80 | 8.30 | 32.20 |
| 1867..... | | | 1 | 1 | 3 | 8 | 12 | 17 | 10 | 4 | 8 | 24 | 88 | 1.89 | 3.91 | 21.10 |
| 1868..... | 21 | 24 | 21 | 7 | 5 | 11 | 7 | 2 | 3 | 1 | 2 | 3 | 107 | 1.79 | 4.25 | 23.70 |
| 1869..... | 1 | 1 | | 1 | 9 | 33 | 37 | 18 | 3 | 3 | 1 | 2 | 109 | 1.69 | 3.90 | 23.10 |
| 1870..... | 5 | 9 | 27 | 14 | 12 | 17 | 4 | 4 | | | | 3 | 95 | 1.29 | 3.09 | 23.88 |
| 1871..... | 7 | 6 | 18 | 24 | 41 | 39 | 19 | | | | 1 | 1 | 156 | 2.23 | 4.67 | 20.87 |
| 1872..... | | 2 | 2 | 4 | 6 | 3 | 7 | 2 | 1 | 2 | 3 | 5 | 37 | 0.36 | 1.00 | 27.67 |
| 1873..... | 9 | 5 | 10 | 22 | 16 | 24 | 11 | 7 | | 1 | | | 105 | 1.09 | 2.76 | 25.16 |
| 1874..... | 1 | | | | 2 | 4 | 4 | 2 | 1 | | 1 | | 15 | 0.18 | 0.38 | 20.29 |
| 1875..... | 5 | 13 | 19 | 19 | 26 | 18 | 11 | 4 | | 1 | | 1 | 117 | 1.48 | 2.92 | 19.72 |
| 1876..... | | | | | | | | | | | | | 15 | 0.17 | 0.36 | 21.02 |
| 1877..... | | 1 | 3 | 1 | 9 | 7 | 19 | 9 | 2 | | 2 | 6 | 59 | 0.73 | 1.37 | 18.68 |
| 1878..... | 4 | 10 | 8 | 5 | 1 | 1 | 1 | 3 | 1 | 1 | | 1 | 36 | 0.48 | 0.82 | 16.99 |
| 1879..... | | | | 1 | | 1 | 5 | 8 | 2 | 2 | 11 | 21 | 51 | 0.59 | 1.03 | 17.52 |
| 1880..... | 16 | 20 | 32 | 24 | 13 | 3 | 7 | 6 | 2 | 1 | 3 | 2 | 129 | 1.23 | 2.56 | 20.79 |
| 1881..... | 4 | | 3 | 9 | 24 | 12 | 16 | 18 | 5 | 3 | 8 | 8 | 110 | 0.79 | 2.03 | 25.60 |
| 1882..... | 8 | 20 | 35 | 43 | 75 | 36 | 11 | 10 | 1 | 2 | 3 | | 244 | 1.91 | 4.35 | 23.60 |
| 1883..... | 1 | 3 | 4 | 3 | 8 | 5 | 2 | 2 | | | 3 | 5 | 44 | 0.38 | 0.68 | 19.92 |
| 1884..... | 3 | 2 | 6 | 24 | 56 | 85 | 61 | 48 | 12 | 1 | 10 | 11 | 319 | 2.55 | 5.06 | 19.80 |
| 1885..... | 9 | 8 | 3 | 10 | 9 | 16 | 7 | 1 | 1 | | | 3 | 76 | 0.61 | 1.14 | 18.76 |
| 1886..... | 5 | 5 | 3 | 1 | 8 | 19 | 25 | 16 | 10 | 7 | 8 | 19 | 126 | 0.91 | 1.78 | 19.43 |
| 1887..... | 43 | 43 | 59 | 64 | 43 | 42 | 32 | 5 | 1 | 2 | 5 | 2 | 341 | 2.21 | 4.48 | 20.27 |
| 1888..... | 3 | 4 | 2 | 10 | 12 | 18 | 27 | 17 | 8 | 7 | 15 | 28 | 151 | 0.95 | 1.88 | 19.65 |
| 1889..... | 41 | 23 | 32 | 30 | 33 | 14 | 12 | 12 | 1 | 1 | | 5 | 204 | 1.20 | 2.18 | 17.56 |
| 1890..... | 3 | | 2 | 1 | 5 | 6 | 4 | 2 | 5 | 12 | 21 | 67 | | 0.31 | 0.55 | 18.09 |
| 1891..... | 33 | 30 | 39 | 43 | 37 | 22 | 23 | 15 | 3 | 3 | 11 | 6 | 265 | 0.96 | 2.12 | 22.20 |
| 1892..... | 9 | 2 | 11 | 14 | 16 | 7 | 22 | 14 | 5 | 13 | 22 | 50 | 185 | 0.71 | 1.29 | 18.23 |
| 1893..... | 36 | 34 | 30 | 33 | 43 | 16 | 12 | 4 | 5 | 8 | 5 | 234 | | 0.86 | 1.46 | 16.92 |
| 1894..... | 10 | 9 | 26 | 23 | 20 | 20 | 20 | 17 | 8 | 7 | 4 | 18 | 182 | 0.76 | 1.16 | 15.24 |
| 1895..... | 21 | 19 | 18 | 24 | 21 | 24 | 14 | 3 | 2 | 2 | 4 | 4 | 156 | 0.64 | 0.97 | 15.14 |
| 1896..... | 8 | 6 | 4 | 4 | 8 | 7 | 13 | 6 | 2 | 6 | 3 | 6 | 73 | 0.31 | 0.45 | 14.36 |

WHOOPIING COUGH.

Deaths as reported by months—Totals by years—Percentages of the mortality from all causes—Deaths per 10 000 of population—Annual death rates from all causes—For the years 1851 to 1896 inclusive.

| YEARS. | MONTHS. | | | | | | | | | | | | WHOOPIING COUGH MORTALITY. | | Annual death rates from all causes per 1000 of population. | |
|--------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|----------------------------------|---------------------------------------|--|------------------------------|
| | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. | Percentages of total mortality. | | Per 10 000 of population. |
| | | | | | | | | | | | | | | | | |
| 1851 | | | | | | 1 | | 1 | 1 | 3 | | 1 | 7 | 0.75 | 2.06 | 36.60 |
| 1852 | 2 | | 1 | 1 | | | | | 2 | | | | 7 | 0.39 | 1.81 | 46.70 |
| 1853 | | | 1 | | | 2 | 2 | 3 | 5 | 2 | 1 | 1 | 17 | 1.28 | 2.88 | 22.40 |
| 1854 | | 1 | 1 | 3 | 2 | | 3 | 10 | 7 | 1 | | | 35 | 0.83 | 5.33 | 64.00 |
| 1855 | | 1 | 1 | | | 1 | 2 | 4 | 6 | 2 | 1 | 1 | 19 | 0.87 | 2.37 | 27.20 |
| 1856 | | 1 | | 1 | 2 | 1 | | 1 | 2 | | | 1 | 9 | 0.43 | 1.07 | 24.80 |
| 1857 | 6 | 7 | 2 | | 1 | 2 | 1 | 1 | | | | | 20 | 0.83 | 2.28 | 27.55 |
| 1858 | | 1 | 1 | | 3 | 3 | 1 | 3 | 3 | 1 | 2 | 1 | 19 | 0.85 | 2.11 | 24.72 |
| 1859 | | 1 | 1 | 3 | | | 1 | 2 | 3 | 1 | | | 12 | 0.60 | 1.29 | 21.30 |
| 1860 | | 1 | 3 | | 1 | 1 | 4 | 9 | 4 | | 1 | | 24 | 1.06 | 2.20 | 20.70 |
| 1861 | | 1 | 3 | 2 | 1 | 3 | 10 | 3 | 1 | | | | 24 | 1.05 | 2.00 | 18.90 |
| 1862 | | 3 | 4 | 5 | 3 | | 1 | 4 | 2 | 2 | | 3 | 27 | 0.95 | 1.97 | 20.51 |
| 1863 | 1 | 3 | 6 | 7 | 10 | 6 | 10 | 14 | 16 | 11 | 3 | 4 | 91 | 2.34 | 6.07 | 25.80 |
| 1864 | 1 | 1 | 5 | 2 | 4 | | | 2 | 2 | 1 | | 1 | 19 | 0.43 | 1.12 | 26.26 |
| 1865 | | | 2 | 3 | | | 2 | 3 | 2 | 2 | | 1 | 15 | 0.41 | 0.84 | 22.50 |
| 1866 | 1 | 2 | | 1 | 3 | 6 | 15 | 63 | 40 | 19 | 17 | 17 | 184 | 3.10 | 9.18 | 32.20 |
| 1867 | 10 | 1 | 10 | 4 | 11 | 4 | 4 | 6 | 6 | 2 | 1 | 3 | 62 | 1.33 | 2.75 | 21.10 |
| 1868 | 3 | 1 | 1 | 4 | | 6 | 6 | 10 | 9 | 10 | 7 | 6 | 63 | 1.05 | 2.50 | 23.70 |
| 1869 | 10 | 10 | 13 | 10 | 13 | 9 | 13 | 25 | 7 | 13 | 5 | 3 | 131 | 2.02 | 4.68 | 23.10 |
| 1870 | 4 | 11 | 12 | 6 | 9 | 4 | 13 | 14 | 7 | 5 | 2 | 4 | 91 | 1.24 | 2.96 | 23.88 |
| 1871 | 4 | 3 | 5 | 7 | 6 | 8 | 20 | | | 2 | 4 | 4 | 63 | 0.90 | 1.89 | 20.87 |
| 1872 | 6 | 4 | 5 | 6 | 3 | 5 | 13 | 41 | 15 | 8 | 10 | 8 | 124 | 1.22 | 3.37 | 27.67 |
| 1873 | 5 | 10 | 8 | 12 | 15 | 12 | 23 | 34 | 16 | 10 | 8 | 2 | 155 | 1.62 | 4.08 | 25.16 |
| 1874 | 5 | 4 | 6 | 7 | 11 | 13 | 17 | 71 | 14 | 4 | 4 | 1 | 107 | 1.33 | 2.71 | 20.29 |
| 1875 | 1 | 2 | 4 | 2 | 4 | 4 | 11 | 21 | 19 | 8 | 13 | 17 | 106 | 1.34 | 2.64 | 19.72 |
| 1876 | | | | | | | | | | | | | 133 | 1.55 | 3.26 | 21.02 |
| 1877 | | 1 | 1 | 3 | 7 | 4 | 6 | 11 | 4 | 6 | 2 | 7 | 52 | 0.65 | 1.20 | 18.68 |
| 1878 | 9 | 14 | 19 | 30 | 32 | 21 | 35 | 28 | 19 | 19 | 5 | 4 | 235 | 3.14 | 5.38 | 16.99 |
| 1879 | | 3 | 6 | | 4 | 1 | 4 | 5 | 6 | | 1 | 3 | 33 | 0.38 | 0.67 | 17.52 |
| 1880 | 4 | 4 | 10 | 2 | 8 | 6 | 8 | 7 | 7 | 3 | 3 | 6 | 68 | 0.65 | 1.35 | 20.79 |
| 1881 | 2 | 8 | 6 | 11 | 17 | 14 | 15 | 32 | 22 | 10 | 8 | 12 | 157 | 1.13 | 2.91 | 25.60 |
| 1882 | 6 | 7 | 7 | 9 | 12 | 9 | 15 | 11 | 10 | 8 | 6 | 1 | 101 | 0.76 | 1.80 | 23.60 |
| 1883 | 7 | 5 | 10 | 6 | 7 | 9 | 10 | 16 | 12 | 5 | 2 | 3 | 92 | 0.80 | 1.58 | 19.92 |
| 1884 | 4 | 5 | 6 | 11 | 9 | 10 | 10 | 11 | 13 | 11 | 11 | 11 | 112 | 0.90 | 1.78 | 19.80 |
| 1885 | 7 | 6 | 8 | 6 | 12 | 6 | 14 | 13 | 3 | 8 | 6 | 5 | 94 | 0.75 | 1.41 | 18.76 |
| 1886 | 7 | 10 | 10 | 11 | 13 | 4 | 11 | 15 | 18 | 3 | 6 | 4 | 112 | 0.82 | 1.59 | 19.43 |
| 1887 | 4 | 2 | 8 | 4 | 7 | 3 | 14 | 19 | 14 | 10 | 11 | 8 | 104 | 0.68 | 1.37 | 20.27 |
| 1888 | 21 | 16 | 23 | 22 | 12 | 15 | 21 | 16 | 17 | 9 | 6 | 5 | 183 | 1.16 | 2.27 | 19.65 |
| 1889 | 7 | 4 | 9 | 5 | 6 | 8 | 5 | 12 | 18 | 7 | 4 | 11 | 96 | 0.57 | 1.03 | 17.56 |
| 1890 | 26 | 18 | 11 | 8 | 12 | 11 | 26 | 31 | 14 | 10 | 15 | 19 | 201 | 0.92 | 1.67 | 18.09 |
| 1891 | 16 | 24 | 24 | 15 | 29 | 13 | 20 | 11 | 12 | 11 | 11 | 8 | 194 | 0.70 | 1.55 | 22.20 |
| 1892 | 13 | 15 | 13 | 11 | 11 | 14 | 17 | 23 | 18 | 10 | 10 | 9 | 164 | 0.63 | 1.14 | 18.23 |
| 1893 | 12 | 5 | 16 | 19 | 18 | 22 | 18 | 38 | 30 | 13 | 10 | 9 | 210 | 0.78 | 1.31 | 16.92 |
| 1894 | 16 | 10 | 11 | 14 | 23 | 15 | 24 | 35 | 38 | 8 | 11 | 5 | 210 | 0.88 | 1.34 | 15.24 |
| 1895 | 19 | 13 | 8 | 6 | 9 | 5 | 14 | 12 | 13 | 11 | 6 | 6 | 122 | 0.50 | 0.76 | 15.14 |
| 1896 | 8 | 5 | 5 | 13 | 22 | 17 | 28 | 24 | 28 | 16 | 10 | 11 | 187 | 0.81 | 1.15 | 14.36 |

CHOLERA INFANTUM.

Deaths as reported by months—Totals by years—Percentages of the total mortality under five years of age—Percentages of the total mortality from all causes—Annual death rates from all causes—For the years 1851 to 1896 inclusive.

| YEARS. | MONTHS. | | | | | | | | | | | | CHOLERA INFANTUM MORTALITY. | | Annual death rates from all causes per 100 of population. | |
|--------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|-----------------------------------|---|---|-----------------------------------|
| | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. | Percentage of deaths un- der 5 years. | | Percentage of total deaths. |
| 1851 | | | | | | | 2 | 11 | 19 | 3 | | | 35 | 9.66 | 3.77 | 36.60 |
| 1852 | | | | | | | 7 | 22 | 12 | 2 | | | 45 | 8.04 | 2.48 | 46.70 |
| 1853 | | | | 1 | | | 1 | 6 | 14 | 2 | | 1 | 25 | 4.27 | 1.88 | 22.40 |
| 1854 | | | | | | 2 | 20 | 22 | 18 | 7 | | | 69 | 5.49 | 1.63 | 64.00 |
| 1855 | | | | | | | 3 | 15 | 5 | | | | 23 | 2.60 | 1.05 | 27.20 |
| 1856 | | | | | | | 5 | 11 | 2 | 1 | | | 19 | 1.90 | 0.91 | 24.80 |
| 1857 | | | | 3 | | | 5 | 13 | 4 | 5 | | | 30 | 2.36 | 1.24 | 27.55 |
| 1858 | | | | | | | 16 | 36 | 14 | 2 | | | 68 | 5.78 | 3.05 | 24.72 |
| 1859 | | | | | 1 | | 10 | 74 | 1 | | | | 86 | 8.26 | 4.28 | 21.30 |
| 1860 | | | 1 | | | | 21 | 62 | 18 | 8 | | | 118 | 10.27 | 5.21 | 20.70 |
| 1861 | 4 | 7 | 4 | 1 | 5 | 14 | 49 | 50 | 36 | 5 | 5 | 3 | 175 | 15.40 | 7.67 | 18.90 |
| 1862 | | | | | | 9 | 12 | 89 | 57 | 8 | | 1 | 175 | 12.34 | 6.17 | 20.51 |
| 1863 | | | | 2 | | 4 | 42 | 72 | 33 | | | | 155 | 8.66 | 3.98 | 25.80 |
| 1864 | | 1 | | 1 | 2 | 5 | 112 | 199 | 67 | 13 | 1 | | 401 | 19.26 | 9.01 | 26.26 |
| 1865 | 1 | | | 2 | | 10 | 115 | 128 | 58 | 15 | 1 | | 332 | 17.18 | 9.06 | 22.50 |
| 1866 | | | 2 | | 1 | 4 | 194 | 242 | 95 | 47 | 6 | 1 | 592 | 20.42 | 9.98 | 32.20 |
| 1867 | | | | 5 | 1 | 9 | 192 | 212 | 86 | 41 | 4 | | 550 | 22.01 | 11.83 | 21.10 |
| 1868 | | | 1 | | 1 | 9 | 288 | 280 | 145 | 17 | 2 | 1 | 742 | 29.32 | 12.39 | 23.70 |
| 1869 | 1 | 1 | 1 | | 2 | 13 | 188 | 332 | 158 | 31 | 2 | 1 | 730 | 25.05 | 11.25 | 23.10 |
| 1870 | 1 | 1 | | | 6 | 146 | 353 | 277 | 99 | 30 | 2 | 1 | 916 | 19.91 | 12.50 | 23.88 |
| 1871 | | | | 1 | 5 | 67 | 316 | 264 | | 21 | 7 | 1 | 682 | 16.88 | 9.77 | 20.87 |
| 1872 | | 2 | 1 | 6 | 10 | 146 | 549 | 530 | 187 | 36 | 1 | | 1469 | 25.04 | 14.46 | 27.67 |
| 1873 | 1 | | | 1 | 4 | 44 | 475 | 438 | 237 | 52 | 7 | 1 | 1260 | 22.19 | 13.18 | 25.16 |
| 1874 | 1 | | 1 | 1 | 4 | 68 | 594 | 406 | 210 | 35 | 5 | 1 | 1326 | 27.08 | 16.42 | 20.29 |
| 1875 | 1 | | 1 | 14 | 7 | 33 | 412 | 278 | 149 | 16 | 2 | 1 | 914 | 19.29 | 11.57 | 19.72 |
| 1876 | | | | | | | | | | | | | 722 | 14.76 | 8.42 | 21.02 |
| 1877 | | 1 | | 8 | 6 | 23 | 246 | 163 | 69 | 13 | | 1 | 530 | 11.74 | 6.60 | 18.68 |
| 1878 | | 1 | 3 | 2 | 1 | 8 | 269 | 155 | 62 | 11 | 2 | 3 | 517 | 12.87 | 6.96 | 16.99 |
| 1879 | 1 | | 1 | 4 | 1 | 70 | 252 | 154 | 33 | 7 | 1 | 1 | 525 | 11.81 | 6.09 | 17.52 |
| 1880 | | 1 | | 2 | 16 | 129 | 307 | 162 | 41 | 13 | 2 | | 673 | 11.93 | 6.43 | 20.79 |
| 1881 | 1 | 3 | 3 | 12 | 70 | 73 | 441 | 369 | 111 | 19 | 5 | 3 | 1110 | 15.05 | 8.07 | 25.60 |
| 1882 | 3 | 2 | 2 | 7 | 4 | 35 | 279 | 322 | 149 | 29 | 10 | | 842 | 12.67 | 6.36 | 23.60 |
| 1883 | | | 9 | 4 | 16 | 65 | 380 | 184 | 70 | 9 | 9 | 6 | 751 | 11.07 | 6.49 | 19.92 |
| 1884 | | 3 | 4 | 23 | 26 | 57 | 398 | 214 | 118 | 43 | 9 | 4 | 899 | 13.48 | 7.20 | 19.80 |
| 1885 | 2 | 4 | 2 | 11 | 36 | 43 | 326 | 205 | 69 | 15 | 3 | 4 | 720 | 11.63 | 5.77 | 18.76 |
| 1886 | 5 | 1 | 6 | 12 | 16 | 77 | 285 | 201 | 106 | 28 | 8 | 5 | 750 | 11.08 | 5.47 | 19.43 |
| 1887 | | 4 | 24 | 2 | 8 | 137 | 432 | 184 | 91 | 18 | 6 | 1 | 907 | 11.98 | 5.88 | 20.27 |
| 1888 | 2 | 4 | 3 | 13 | 5 | 34 | 399 | 278 | 106 | 20 | 8 | 2 | 874 | 11.60 | 5.53 | 19.65 |
| 1889 | 2 | 1 | 2 | 5 | 7 | 21 | 428 | 319 | 210 | 41 | 12 | 4 | 1052 | 12.70 | 6.20 | 17.56 |
| 1890 | 16 | 22 | 3 | 12 | 16 | 69 | 468 | 314 | 103 | 26 | 7 | 2 | 1058 | 10.62 | 4.83 | 18.09 |
| 1891 | 7 | 8 | 20 | 66 | 39 | 48 | 349 | 319 | 170 | 64 | 15 | 17 | 1122 | 8.76 | 4.04 | 22.20 |
| 1892 | 26 | 8 | 9 | 22 | 25 | 98 | 444 | 360 | 155 | 42 | 13 | 9 | 1211 | 10.38 | 4.61 | 18.23 |
| 1893 | 12 | 3 | 20 | 18 | 13 | 56 | 665 | 507 | 252 | 61 | 13 | 3 | 1623 | 13.12 | 5.99 | 16.92 |
| 1894 | 5 | 4 | 12 | 10 | 21 | 127 | 797 | 494 | 356 | 168 | 38 | 33 | 2065 | 18.74 | 8.64 | 15.24 |
| 1895 | 3 | 2 | 6 | 8 | 28 | 174 | 524 | 300 | 259 | 51 | 11 | 10 | 1376 | 13.23 | 5.69 | 15.14 |
| 1896 | 22 | 6 | 7 | 10 | 36 | 177 | 469 | 322 | 107 | 29 | 13 | 4 | 1202 | 12.39 | 5.18 | 14.36 |

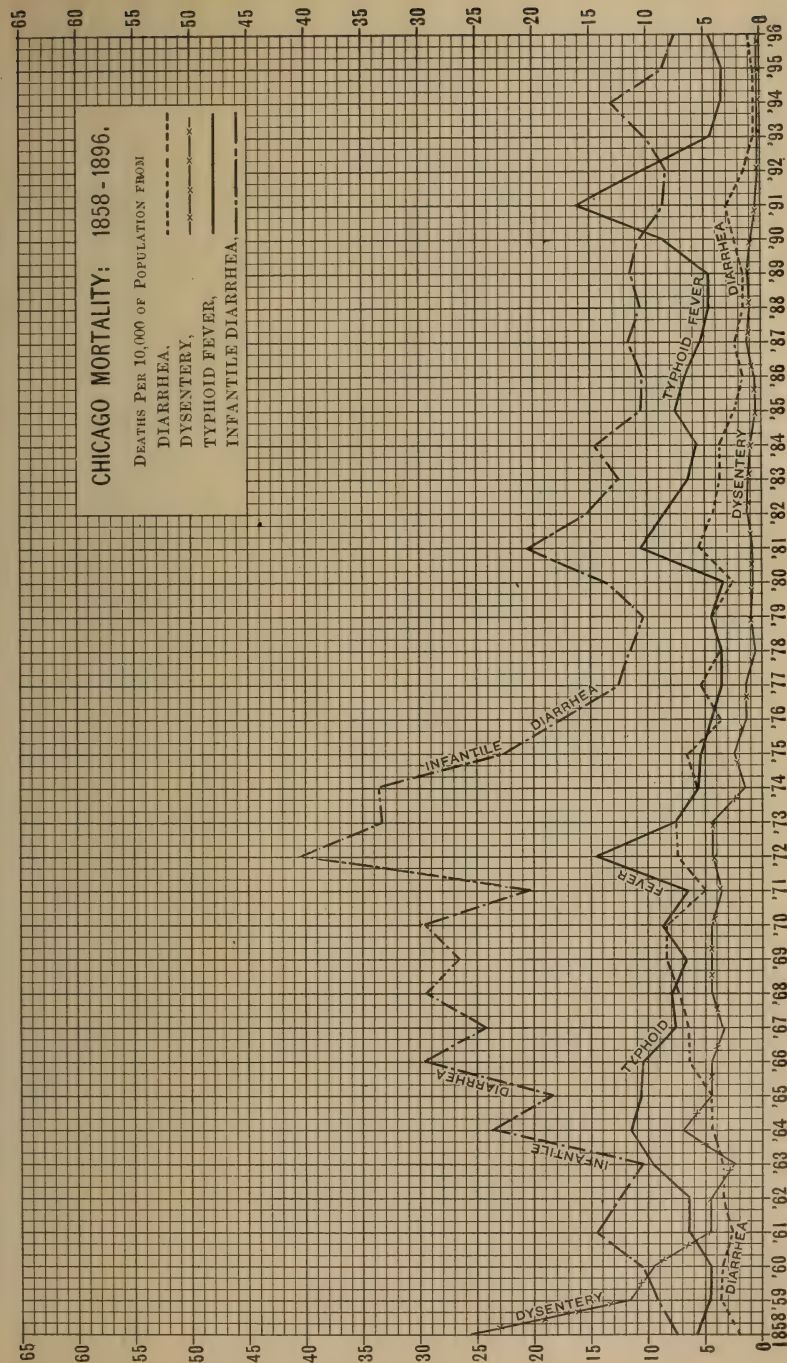
DIARRHEA.

Deaths as reported by months—Totals by years—Percentages of the mortality from all causes—Deaths per 10000 of population—Annual death rates from all causes—For the years 1851 to 1896 inclusive.

| YEARS. | MONTHS. | | | | | | | | | | | | DIARRHEA MORTALITY. | | Annual death rates from all causes per 100 of population. | |
|-----------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|---------------------|---------------------------------|---|--------------------------|
| | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. | Percentages of total mortality. | | Per 10000 of population. |
| 1851..... | ... | ... | ... | ... | ... | ... | 1 | 10 | 6 | 1 | ... | ... | 18 | 1.94 | 5.30 | 36.60 |
| 1852..... | ... | ... | ... | ... | ... | 1 | 4 | 15 | 12 | 2 | 2 | 5 | 51 | 2.82 | 13.18 | 46.70 |
| 1853..... | 2 | ... | ... | 2 | ... | 1 | 1 | 5 | 7 | 6 | 2 | 5 | 31 | 2.34 | 5.25 | 22.40 |
| 1854..... | ... | ... | 6 | ... | 7 | 7 | 54 | 41 | 63 | 20 | 10 | ... | 210 | 4.98 | 31.97 | 64.00 |
| 1855..... | 3 | 2 | 1 | 1 | 1 | ... | 8 | 34 | 27 | 12 | 3 | ... | 92 | 4.22 | 11.50 | 27.20 |
| 1856..... | ... | ... | 1 | ... | 1 | 6 | 22 | 23 | 14 | ... | ... | ... | 67 | 3.21 | 7.99 | 24.80 |
| 1857..... | ... | ... | ... | ... | 1 | ... | 15 | 8 | 24 | 13 | 2 | ... | 63 | 2.61 | 7.19 | 27.55 |
| 1858..... | ... | ... | ... | ... | ... | ... | 5 | 10 | 2 | ... | ... | ... | 17 | 0.76 | 1.89 | 24.72 |
| 1859..... | 1 | 2 | ... | ... | ... | ... | 10 | 19 | 3 | 1 | ... | 1 | 37 | 1.84 | 3.98 | 21.30 |
| 1860..... | ... | ... | ... | ... | ... | 1 | 20 | 11 | 4 | ... | 1 | ... | 37 | 1.63 | 3.39 | 20.70 |
| 1861..... | 1 | 1 | 1 | ... | ... | 2 | 6 | 6 | 6 | 6 | 1 | 1 | 31 | 1.36 | 2.58 | 18.90 |
| 1862..... | ... | ... | ... | ... | 1 | 1 | 31 | 7 | 4 | ... | ... | ... | 44 | 1.53 | 3.21 | 20.51 |
| 1863..... | ... | 2 | ... | 2 | ... | 1 | 2 | 7 | 16 | 6 | 4 | 9 | 49 | 1.26 | 3.27 | 25.80 |
| 1864..... | 3 | 4 | 1 | 1 | 3 | ... | 5 | 19 | 23 | 7 | 6 | 5 | 77 | 1.73 | 4.56 | 26.26 |
| 1865..... | 3 | 2 | 3 | 2 | 9 | 2 | 10 | 22 | 9 | 11 | 8 | 4 | 85 | 2.32 | 4.76 | 22.50 |
| 1866..... | 1 | 5 | 3 | 2 | ... | 3 | 21 | 38 | 21 | 21 | 5 | 5 | 125 | 2.11 | 6.25 | 32.20 |
| 1867..... | 4 | 1 | ... | 2 | ... | 2 | 25 | 45 | 47 | 12 | 4 | 5 | 147 | 3.16 | 6.53 | 21.10 |
| 1868..... | 3 | 1 | 4 | ... | 6 | 13 | 34 | 60 | 44 | 13 | 3 | 2 | 184 | 3.08 | 7.30 | 23.70 |
| 1869..... | 3 | 3 | 1 | 2 | 7 | 7 | 37 | 87 | 55 | 22 | 3 | 2 | 229 | 3.53 | 8.18 | 23.10 |
| 1870..... | 2 | ... | 1 | 3 | 4 | 37 | 92 | 66 | 33 | 19 | 2 | 1 | 260 | 3.55 | 8.47 | 23.88 |
| 1871..... | 1 | 2 | 1 | 2 | 6 | 22 | 57 | 59 | ... | 8 | 9 | 2 | 169 | 2.42 | 5.06 | 20.87 |
| 1872..... | ... | 3 | 2 | 8 | 3 | 15 | 67 | 101 | 37 | 16 | 5 | 5 | 262 | 2.58 | 7.13 | 27.67 |
| 1873..... | 1 | 1 | 7 | 5 | 8 | 14 | 93 | 73 | 51 | 23 | 11 | 1 | 288 | 3.01 | 7.58 | 25.16 |
| 1874..... | ... | ... | 3 | 4 | 2 | 7 | 67 | 77 | 39 | 17 | 4 | 3 | 223 | 2.76 | 5.64 | 20.29 |
| 1875..... | 5 | 2 | 2 | 12 | 3 | 17 | 80 | 66 | 47 | 13 | 3 | 2 | 252 | 3.19 | 6.30 | 19.72 |
| 1876..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 160 | 1.87 | 3.92 | 21.02 |
| 1877..... | 6 | 4 | 1 | 4 | 2 | 10 | 74 | 61 | 39 | 20 | 3 | 3 | 227 | 2.83 | 5.28 | 18.68 |
| 1878..... | 3 | 1 | 2 | 1 | 6 | 4 | 57 | 46 | 23 | 8 | 1 | 1 | 153 | 2.06 | 3.50 | 16.99 |
| 1879..... | ... | ... | 4 | 1 | 3 | 14 | 86 | 69 | 27 | 5 | 4 | 2 | 215 | 2.50 | 4.38 | 17.52 |
| 1880..... | 5 | 3 | 1 | 2 | 2 | 15 | 55 | 24 | 21 | 12 | 5 | 2 | 147 | 1.41 | 2.92 | 20.79 |
| 1881..... | 5 | 6 | 10 | 9 | 31 | 20 | 76 | 68 | 47 | 18 | 13 | 14 | 317 | 2.28 | 5.69 | 25.60 |
| 1882..... | 9 | 5 | 5 | 9 | 9 | 15 | 44 | 61 | 51 | 22 | 6 | 6 | 242 | 1.83 | 4.32 | 23.60 |
| 1883..... | 5 | 2 | 10 | 12 | 8 | 17 | 54 | 45 | 38 | 8 | 7 | 13 | 219 | 1.90 | 3.78 | 19.92 |
| 1884..... | 3 | 7 | 5 | 14 | 12 | 22 | 57 | 54 | 41 | 20 | 5 | 4 | 244 | 1.96 | 3.87 | 19.80 |
| 1885..... | 5 | 2 | 5 | 15 | 23 | 11 | 31 | 43 | 20 | 6 | 2 | 8 | 171 | 1.37 | 2.57 | 18.76 |
| 1886..... | 6 | 8 | 6 | 8 | 3 | 9 | 34 | 27 | 15 | 10 | 2 | 2 | 130 | 0.95 | 1.85 | 19.43 |
| 1887..... | 5 | 4 | 11 | 6 | 3 | 19 | 54 | 22 | 22 | 11 | 3 | 2 | 162 | 1.05 | 2.13 | 20.27 |
| 1888..... | 2 | 3 | 4 | 11 | 6 | 7 | 37 | 45 | 19 | 10 | 3 | 1 | 148 | 0.94 | 1.84 | 19.65 |
| 1889..... | 3 | 2 | 5 | 4 | 5 | 9 | 51 | 36 | 21 | 13 | 13 | 5 | 167 | 0.99 | 1.79 | 17.56 |
| 1890..... | 14 | 19 | 15 | 6 | 5 | 7 | 64 | 49 | 45 | 13 | 5 | 3 | 245 | 1.12 | 2.04 | 18.09 |
| 1891..... | 8 | 13 | 16 | 37 | 14 | 19 | 91 | 75 | 51 | 27 | 7 | 17 | 375 | 1.35 | 3.00 | 22.20 |
| 1892..... | 19 | 5 | 3 | 11 | 10 | 9 | 47 | 49 | 35 | 21 | 9 | 5 | 223 | 0.85 | 1.55 | 18.23 |
| 1893..... | 8 | 4 | 11 | 3 | 8 | 7 | 42 | 18 | 24 | 13 | 6 | 1 | 145 | 0.54 | 0.91 | 16.92 |
| 1894..... | 6 | 1 | 5 | 8 | 5 | 13 | 37 | 18 | 21 | 13 | 7 | 2 | 136 | 0.57 | 0.87 | 15.24 |
| 1895..... | 7 | 5 | ... | 4 | 3 | 6 | 18 | 29 | 20 | 13 | 4 | 1 | 110 | 0.45 | 0.69 | 15.14 |
| 1896..... | 11 | 3 | 5 | 2 | 4 | 28 | 44 | 20 | 20 | 6 | 4 | 3 | 150 | 0.65 | 0.93 | 14.36 |

| YEARS. | MONTHS. | | | | | | | | | | | | DYSENTERY MORTALITY. | | Annual death rates from all causes per 100 of population. | | |
|--------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|----------------------|---------------------------------|---|---------------------------|-------|
| | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. | Percentages of total mortality. | | Per 10 000 of population. | |
| 1851 | | | | | | | 4 | 9 | 17 | 1 | 2 | | 22 | 2.37 | 6.47 | 36.60 | |
| 1852 | | | 1 | 1 | 3 | 4 | 2 | 13 | 16 | 8 | 1 | 3 | 53 | 2.93 | 13.66 | 46.70 | |
| 1853 | | | | 2 | | | | 13 | 13 | 12 | 6 | 1 | 54 | 4.08 | 9.15 | 22.40 | |
| 1854 | | | 1 | 1 | 2 | 14 | 15 | 82 | 71 | 42 | 10 | 4 | 242 | 5.74 | 36.78 | 64.00 | |
| 1855 | | 1 | 2 | 1 | 1 | | 31 | 56 | 41 | 11 | 4 | 2 | 150 | 6.88 | 18.75 | 27.20 | |
| 1856 | 1 | 1 | 1 | 3 | 1 | 3 | 44 | 141 | 53 | 26 | 17 | 15 | 305 | 14.62 | 36.31 | 24.80 | |
| 1857 | 23 | 2 | 6 | | 3 | 2 | 91 | 170 | 109 | 24 | 17 | 18 | 465 | 19.26 | 53.08 | 27.55 | |
| 1858 | 1 | 3 | | | | 5 | 97 | 90 | 15 | 11 | 2 | | 224 | 10.07 | 24.88 | 24.72 | |
| 1859 | 1 | 1 | | 3 | 5 | 3 | 15 | 50 | 25 | 6 | | 1 | 110 | 5.48 | 11.83 | 21.30 | |
| 1860 | | | | | | 16 | 50 | 26 | | 4 | | | 101 | 4.46 | 9.24 | 20.70 | |
| 1861 | 1 | | | 2 | 5 | 4 | 25 | 7 | 9 | 2 | 1 | 1 | 57 | 2.50 | 4.75 | 18.90 | |
| 1862 | | | | 1 | 1 | 1 | | 9 | 17 | 19 | 17 | | 1 | 65 | 2.29 | 4.74 | 20.51 |
| 1863 | 2 | 2 | | 1 | 2 | | 11 | 6 | 12 | 5 | 1 | 2 | 44 | 1.13 | 2.93 | 25.80 | |
| 1864 | 3 | 2 | 2 | 1 | 1 | 6 | 4 | 13 | 29 | 39 | 20 | 1 | 119 | 2.68 | 7.02 | 26.28 | |
| 1865 | 2 | | 2 | | 1 | 1 | 21 | 25 | 19 | 9 | | 4 | 85 | 2.32 | 4.76 | 22.50 | |
| 1866 | 2 | 1 | | 3 | 3 | 6 | 29 | 29 | 14 | 10 | 2 | 2 | 99 | 1.67 | 4.99 | 32.20 | |
| 1867 | | 1 | | | 2 | 2 | 1 | 11 | 24 | 20 | 13 | 5 | 2 | 79 | 1.70 | 3.51 | 21.10 |
| 1868 | 2 | 4 | 2 | 1 | 2 | 3 | 17 | 47 | 23 | 14 | 5 | 2 | 122 | 2.04 | 4.84 | 23.70 | |
| 1869 | 1 | 3 | 2 | 2 | 3 | 7 | 21 | 38 | 38 | 16 | 5 | 1 | 137 | 2.13 | 4.89 | 23.10 | |
| 1870 | 4 | 1 | 3 | 4 | 1 | 18 | 26 | 42 | 33 | 7 | 2 | 1 | 142 | 1.94 | 4.63 | 23.88 | |
| 1871 | | 2 | 1 | 3 | 8 | 17 | 33 | 43 | | 7 | 8 | 3 | 125 | 1.79 | 3.74 | 20.87 | |
| 1872 | 1 | | 1 | 2 | 3 | 12 | 38 | 62 | 27 | 12 | 5 | 1 | 166 | 1.63 | 4.52 | 27.67 | |
| 1873 | 1 | 6 | 1 | 4 | 7 | 6 | 36 | 61 | 31 | 10 | 3 | | 166 | 1.74 | 4.37 | 25.16 | |
| 1874 | 1 | | 2 | 4 | 4 | 3 | 10 | 20 | 16 | 11 | 2 | 2 | 94 | 1.92 | 1.87 | 20.29 | |
| 1875 | 1 | 2 | 2 | 5 | 2 | 5 | 28 | 30 | 14 | 5 | 2 | | 76 | 1.22 | 2.39 | 19.72 | |
| 1876 | | | | | | | | | | | | | 63 | 0.73 | 1.54 | 21.02 | |
| 1877 | 1 | 3 | 3 | 3 | 1 | 3 | 18 | 9 | 17 | 5 | 3 | 4 | 70 | 0.87 | 1.62 | 18.68 | |
| 1878 | 1 | 1 | 4 | 4 | 1 | | 6 | 9 | 6 | 1 | 1 | 1 | 35 | 0.47 | 0.80 | 16.99 | |
| 1879 | | | 3 | 1 | 3 | 6 | 10 | 17 | 8 | 4 | | 1 | 53 | 0.62 | 1.07 | 17.52 | |
| 1880 | 2 | | 1 | 2 | 7 | 4 | 9 | 12 | 7 | 4 | | 3 | 52 | 0.50 | 1.03 | 20.79 | |
| 1881 | 1 | 3 | 3 | 3 | 3 | 6 | 16 | 8 | 15 | 2 | 4 | 1 | 63 | 0.45 | 1.17 | 25.60 | |
| 1882 | 5 | | 2 | 5 | 3 | 4 | 8 | 21 | 16 | 8 | 5 | 2 | 79 | 0.60 | 1.41 | 23.60 | |
| 1883 | 1 | 1 | 3 | 4 | 1 | 6 | 20 | 16 | 12 | 9 | 1 | 2 | 76 | 0.66 | 1.31 | 19.92 | |
| 1884 | | 1 | 2 | 1 | 3 | 2 | 17 | 14 | 20 | 7 | 5 | 5 | 77 | 0.62 | 1.22 | 19.80 | |
| 1885 | 1 | 1 | 1 | 1 | 6 | 4 | 22 | 8 | 8 | 4 | 1 | 1 | 58 | 0.46 | 0.87 | 18.76 | |
| 1886 | 2 | 1 | 1 | 2 | 1 | 6 | 17 | 13 | 11 | 6 | 1 | 3 | 64 | 0.45 | 0.91 | 19.43 | |
| 1887 | 2 | 3 | 3 | 8 | 1 | 8 | 36 | 33 | 17 | 7 | 2 | 1 | 121 | 0.79 | 1.58 | 20.27 | |
| 1888 | 2 | 3 | 3 | 6 | 1 | 7 | 31 | 28 | 14 | 6 | 2 | | 103 | 0.65 | 1.28 | 19.65 | |
| 1889 | 2 | 2 | 2 | 4 | 4 | 5 | 33 | 38 | 21 | 10 | 6 | 6 | 133 | 0.79 | 1.42 | 17.56 | |
| 1890 | 9 | 10 | 4 | 8 | 4 | 10 | 29 | 29 | 17 | 10 | 3 | 3 | 136 | 0.62 | 1.13 | 18.09 | |
| 1891 | 3 | 5 | 7 | 32 | 11 | 1 | 11 | 7 | 10 | 3 | 6 | 4 | 100 | 0.35 | 0.80 | 22.20 | |
| 1892 | 6 | 5 | 1 | 2 | 4 | 2 | 8 | 11 | 6 | 4 | 2 | 3 | 54 | 0.21 | 0.37 | 18.23 | |
| 1893 | 2 | 2 | | 1 | 2 | 1 | 15 | 15 | 16 | 9 | 1 | 3 | 67 | 0.25 | 0.42 | 16.92 | |
| 1894 | 3 | 3 | 3 | 4 | 5 | 4 | 27 | 5 | 6 | 3 | 1 | | 64 | 0.26 | 0.40 | 15.24 | |
| 1895 | 1 | | 2 | 3 | 2 | 4 | 19 | 10 | 13 | 7 | 2 | 1 | 64 | 0.26 | 0.40 | 15.14 | |
| 1896 | 7 | 4 | 5 | 6 | 6 | 6 | 10 | 14 | 10 | | | 1 | 69 | 0.30 | 0.43 | 14.36 | |

DEATHS FROM DIARRHEA, DYSENTERY, TYPHOID FEVER AND INFANTILE DIARRHEA, BY YEARS: 1858-1896



TYPHOID FEVER.

Deaths as reported by months—Totals by years—Percentages of the mortality from all causes—Deaths per 10 000 of population—Annual death rates from all causes—For the years 1851 to 1896 inclusive.

| YEARS. | MONTHS. | | | | | | | | | | | | TYPHOID FEVER MORTALITY. | | Annual death rates from all causes per 1000 of population. | |
|-----------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|--------------------------|---------------------------------|--|---------------------------|
| | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. | Percentages of total mortality. | | Per 10 000 of population. |
| 1851..... | | | | | | 1 | ... | 3 | 1 | 4 | .... | 1 | 10 | 1.08 | 2.94 | 36.60 |
| 1852..... | 3 | 1 | 2 | 2 | 1 | ... | 4 | 5 | 5 | 15 | 6 | 4 | 48 | 2.65 | 12.37 | 46.70 |
| 1853..... | | 2 | 3 | 3 | 1 | 1 | 4 | 1 | 6 | 3 | 1 | 10 | 35 | 2.64 | 5.92 | 22.40 |
| 1854..... | 3 | 2 | ... | 3 | 3 | 10 | 14 | 15 | 19 | 3 | 9 | 5 | 86 | 2.04 | 13.05 | 64.00 |
| 1855..... | 2 | 2 | 2 | 2 | 2 | 2 | 5 | 1 | 10 | 7 | 4 | 8 | 43 | 1.97 | 5.37 | 27.20 |
| 1856..... | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 9 | 16 | 13 | 14 | 2 | 66 | 3.16 | 7.85 | 24.80 |
| 1857..... | 1 | 3 | 4 | 4 | 8 | 2 | 4 | 8 | 17 | 11 | 13 | 7 | 82 | 3.40 | 9.36 | 27.55 |
| 1858..... | 1 | 5 | 4 | 6 | 6 | 4 | 1 | 2 | 7 | 4 | 1 | 2 | 49 | 2.20 | 5.44 | 24.72 |
| 1859..... | 2 | 1 | 8 | 2 | 4 | 2 | 1 | 3 | 9 | 9 | 3 | 7 | 51 | 2.54 | 4.40 | 21.30 |
| 1860..... | 3 | 2 | 3 | 6 | ... | 2 | 2 | 6 | 3 | 15 | 3 | 3 | 46 | 2.08 | 4.22 | 20.70 |
| 1861..... | 5 | 4 | 5 | 6 | 9 | 4 | 8 | 7 | 2 | 8 | 7 | 9 | 74 | 3.25 | 6.16 | 18.90 |
| 1862..... | 6 | 5 | 2 | 3 | 4 | 3 | 8 | 9 | 13 | 11 | 15 | 6 | 85 | 3.00 | 6.20 | 20.51 |
| 1863..... | 14 | 35 | 12 | 7 | 6 | 6 | 4 | 5 | 25 | 10 | 10 | 15 | 149 | 3.58 | 9.93 | 25.80 |
| 1864..... | 24 | 18 | 24 | 9 | 9 | 10 | 5 | 18 | 23 | 21 | 14 | 17 | 192 | 4.54 | 11.33 | 26.26 |
| 1865..... | 13 | 8 | 14 | 16 | 9 | 7 | 15 | 17 | 20 | 25 | 26 | 20 | 190 | 5.19 | 10.67 | 22.50 |
| 1866..... | 21 | 12 | 9 | 9 | 12 | 13 | 18 | 14 | 35 | 38 | 18 | 4 | 203 | 3.42 | 10.25 | 32.20 |
| 1867..... | 11 | 10 | 5 | 15 | 5 | 15 | 9 | 13 | 18 | 25 | 26 | 13 | 165 | 3.55 | 7.33 | 21.10 |
| 1868..... | 14 | 7 | 11 | 7 | 5 | 8 | 10 | 29 | 32 | 37 | 21 | 19 | 200 | 3.34 | 7.93 | 23.70 |
| 1869..... | 6 | 7 | 7 | 7 | 12 | 12 | 17 | 17 | 22 | 38 | 29 | 9 | 183 | 2.82 | 6.53 | 23.10 |
| 1870..... | 6 | 8 | 16 | 8 | 8 | 10 | 14 | 38 | 58 | 49 | 35 | 18 | 268 | 3.66 | 8.74 | 23.88 |
| 1871..... | 8 | 7 | 8 | 9 | 10 | ... | 12 | ... | 18 | 75 | 57 | 204 | 2.92 | 6.10 | 20.87 | |
| 1872..... | 19 | 11 | 13 | 12 | 19 | 10 | 17 | 94 | 140 | 107 | 49 | 33 | 524 | 5.16 | 14.27 | 27.67 |
| 1873..... | 17 | 8 | 6 | 11 | 12 | 13 | 12 | 31 | 52 | 55 | 38 | 17 | 272 | 2.85 | 7.15 | 25.16 |
| 1874..... | 13 | 11 | 11 | 11 | 5 | 7 | 10 | 28 | 33 | 36 | 25 | 21 | 211 | 2.61 | 5.34 | 20.29 |
| 1875..... | 11 | 8 | 10 | 10 | 9 | 4 | 12 | 19 | 46 | 44 | 17 | 17 | 207 | 2.62 | 5.16 | 19.72 |
| 1876..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 168 | 1.96 | 4.12 | 21.02 |
| 1877..... | 7 | 9 | 11 | 2 | 5 | 7 | 19 | 16 | 30 | 25 | 20 | 8 | 159 | 1.98 | 3.69 | 18.68 |
| 1878..... | 6 | 10 | 9 | 9 | 6 | 17 | 16 | 25 | 17 | 15 | 10 | 146 | 1.97 | 3.34 | 16.99 | |
| 1879..... | 12 | 13 | 11 | 7 | 11 | 14 | 8 | 33 | 33 | 30 | 17 | 19 | 208 | 2.41 | 4.23 | 17.52 |
| 1880..... | 7 | 10 | 8 | 11 | 8 | 10 | 11 | 22 | 26 | 31 | 14 | 13 | 171 | 1.63 | 3.39 | 20.79 |
| 1881..... | 13 | 15 | 13 | 10 | 29 | 24 | 23 | 98 | 94 | 123 | 73 | 53 | 568 | 4.09 | 10.51 | 25.60 |
| 1882..... | 62 | 39 | 25 | 15 | 26 | 16 | 25 | 52 | 59 | 66 | 38 | 38 | 462 | 3.49 | 8.25 | 23.60 |
| 1883..... | 22 | 13 | 17 | 16 | 13 | 17 | 23 | 50 | 44 | 41 | 45 | 60 | 361 | 3.12 | 6.22 | 19.92 |
| 1884..... | 42 | 26 | 13 | 18 | 19 | 23 | 22 | 48 | 36 | 39 | 34 | 34 | 354 | 2.84 | 5.61 | 19.80 |
| 1885..... | 33 | 14 | 17 | 21 | 38 | 32 | 79 | 67 | 91 | 33 | 39 | 32 | 496 | 3.98 | 7.45 | 18.76 |
| 1886..... | 19 | 23 | 35 | 45 | 37 | 30 | 36 | 57 | 54 | 66 | 52 | 29 | 483 | 3.53 | 6.86 | 19.43 |
| 1887..... | 26 | 24 | 41 | 35 | 23 | 13 | 35 | 48 | 41 | 40 | 38 | 18 | 382 | 2.48 | 5.02 | 20.27 |
| 1888..... | 21 | 20 | 9 | 19 | 19 | 16 | 32 | 50 | 60 | 46 | 40 | 43 | 375 | 2.35 | 4.67 | 19.65 |
| 1889..... | 30 | 21 | 15 | 12 | 16 | 18 | 29 | 64 | 77 | 68 | 68 | 35 | 453 | 2.67 | 4.84 | 17.56 |
| 1890..... | 53 | 136 | 103 | 45 | 82 | 107 | 86 | 115 | 95 | 72 | 67 | 47 | 1008 | 4.60 | 8.33 | 18.09 |
| 1891..... | 67 | 61 | 71 | 136 | 408 | 167 | 200 | 182 | 198 | 171 | 150 | 186 | 1997 | 7.20 | 15.97 | 22.20 |
| 1892..... | 311 | 187 | 76 | 56 | 70 | 55 | 211 | 179 | 138 | 92 | 67 | 47 | 1489 | 5.67 | 10.35 | 18.23 |
| 1893..... | 41 | 30 | 41 | 58 | 56 | 60 | 55 | 76 | 86 | 81 | 43 | 43 | 670 | 2.47 | 4.18 | 16.92 |
| 1894..... | 46 | 26 | 27 | 30 | 31 | 31 | 37 | 52 | 71 | 68 | 38 | 34 | 491 | 2.05 | 3.14 | 15.24 |
| 1895..... | 30 | 21 | 26 | 30 | 30 | 18 | 36 | 59 | 76 | 90 | 60 | 42 | 518 | 2.14 | 3.24 | 15.14 |
| 1896..... | 87 | 89 | 65 | 33 | 31 | 44 | 58 | 64 | 87 | 89 | 60 | 44 | 751 | 3.24 | 4.64 | 14.36 |

ASIATIC CHOLERA.

*Deaths as reported by months—Totals by years—Percentages of the mortality from all causes—Deaths per 10 000 of population—Annual death rates from all causes—
For the years of its occurrence, 1851 to 1873 inclusive.*

| YEARS. | MONTHS. | | | | | | | | | | | | ASIATIC CHOLERA MORTALITY. | | Annual death rates from all causes per 1000 of population. | |
|-----------|----------|-----------|--------|--------|-------|-------|-------|---------|------------|----------|-----------|-----------|----------------------------|---------------------------------|--|---------------------------|
| | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. | Percentages of total mortality. | | Per 10 000 of population. |
| 1851..... | | | | | | 2 | 21 | 122 | 67 | 4 | ..... | ..... | 216 | 23.30 | 63.53 | 36.60 |
| 1852..... | | | | | 7 | 21 | 95 | 235 | 193 | 70 | 9 | ..... | 630 | 34.83 | 165.79 | 46.70 |
| 1853..... | | | | | | | 1 | ..... | ..... | ..... | ..... | ..... | 1 | ..... | ..... | 22.40 |
| 1854..... | | | | | 46 | 170 | 581 | 254 | 174 | 159 | 40 | ..... | 1424 | 33.77 | 219.00 | 64.00 |
| 1855..... | | | | | 2 | ..... | 34 | 66 | 44 | 1 | ..... | ..... | 147 | 6.74 | 18.37 | 27.20 |
| 1863..... | | | | | | | | 3 | 1 | ..... | ..... | ..... | 4 | 0.10 | 0.26 | 25.80 |
| 1864..... | | | | | | | 1 | ..... | ..... | ..... | ..... | ..... | 1 | ..... | ..... | 26.26 |
| 1866..... | | | | | | | | 139 | 166 | 673 | 12 | ..... | 990 | 16.69 | 49.50 | 32.20 |
| 1867..... | | | | | | | 3 | 5 | 1 | 1 | ..... | ..... | 10 | 0.21 | 0.44 | 21.10 |
| 1873..... | | | | | 1 | 4 | 22 | 40 | 13 | ..... | ..... | ..... | 80 | 0.42 | 1.05 | 25.16 |

CANCER.

Deaths as reported by months—Totals by years—Percentages of the mortality from all causes—Deaths per 10 000 of population—Annual death rates from all causes—For the years 1851 to 1896 inclusive.

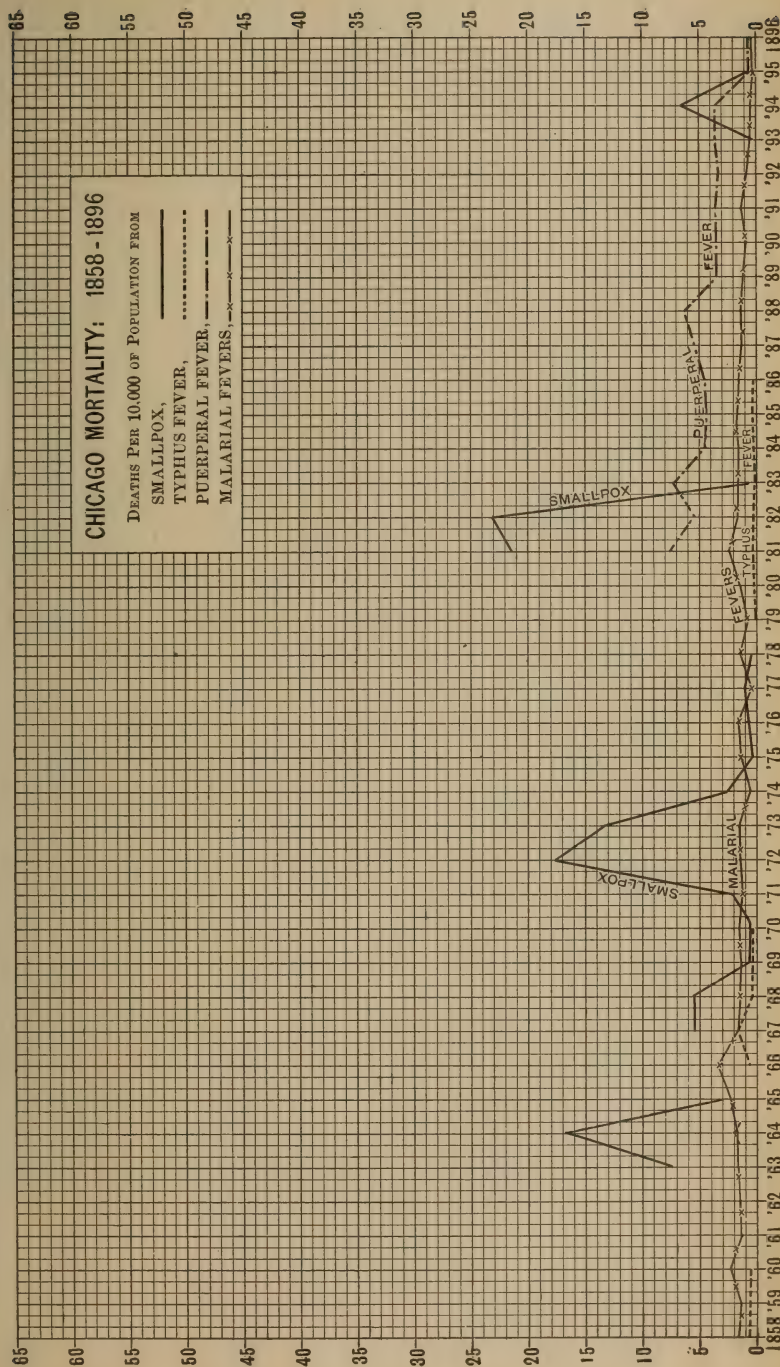
| YEARS. | MONTHS. | | | | | | | | | | | | CANCER MORTALITY. | | Annual death rates from all causes per 100 of population. | | |
|--------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|-------------------|---------------------------------|---|---------------------------|-------|
| | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. | Percentages of total mortality. | | Per 10 000 of population. | |
| 1851 | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | 1 | 0.11 | 0.30 | 36.60 | |
| 1852 | 1 | ... | ... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | 2 | 0.11 | 0.51 | 46.70 | |
| 1853 | ... | 1 | ... | ... | ... | 1 | 2 | ... | ... | ... | ... | ... | 4 | 0.30 | 0.68 | 22.40 | |
| 1854 | ... | ... | 1 | ... | ... | ... | ... | 1 | ... | 3 | 1 | ... | 5 | 0.12 | 0.76 | 64.00 | |
| 1855 | ... | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... | 3 | 0.14 | 0.38 | 27.20 | |
| 1856 | ... | ... | 1 | ... | ... | 1 | ... | ... | ... | ... | ... | ... | 2 | 0.10 | 0.24 | 24.80 | |
| 1857 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 27.55 | |
| 1858 | ... | 1 | 1 | 1 | ... | ... | ... | ... | 1 | ... | ... | ... | 4 | 0.18 | 0.44 | 24.72 | |
| 1859 | 1 | ... | ... | ... | 2 | ... | ... | ... | ... | ... | 1 | 1 | 5 | 0.25 | 0.54 | 21.30 | |
| 1860 | ... | ... | ... | 1 | ... | ... | 1 | 2 | ... | ... | ... | 1 | 5 | 0.22 | 0.46 | 20.70 | |
| 1861 | ... | ... | ... | ... | ... | 1 | 1 | ... | ... | 1 | 2 | 2 | 7 | 0.31 | 0.58 | 18.90 | |
| 1862 | 1 | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | ... | 3 | 0.11 | 0.22 | 20.51 | |
| 1863 | ... | ... | 3 | ... | ... | ... | ... | 2 | ... | 3 | ... | ... | 9 | 0.23 | 0.60 | 25.80 | |
| 1864 | 3 | 1 | ... | 1 | 1 | ... | ... | 2 | ... | 2 | ... | 1 | 11 | 0.25 | 0.64 | 26.26 | |
| 1865 | ... | 1 | 1 | 1 | 2 | 2 | 4 | 1 | 1 | ... | 3 | 1 | 16 | 0.44 | 0.89 | 22.50 | |
| 1866 | 1 | 5 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 2 | 6 | 2 | 36 | 0.61 | 1.80 | 32.20 | |
| 1867 | 2 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 5 | 4 | 7 | 7 | 4 | 45 | 0.97 | 2.00 | 21.10 |
| 1868 | 6 | 5 | 8 | 9 | 5 | 8 | 2 | 7 | 12 | 5 | 10 | 5 | 82 | 1.37 | 3.25 | 23.70 | |
| 1869 | 8 | 6 | 6 | 2 | 7 | 4 | 4 | 4 | 7 | 6 | 2 | 7 | 63 | 0.97 | 2.25 | 23.10 | |
| 1870 | 4 | 4 | 5 | 8 | 7 | 9 | 12 | 10 | 6 | 7 | 6 | 9 | 87 | 1.19 | 2.83 | 23.88 | |
| 1871 | 5 | 7 | 5 | 6 | 5 | 7 | 5 | 15 | ... | 4 | 5 | 4 | 68 | 0.97 | 2.04 | 20.87 | |
| 1872 | 7 | 6 | 3 | 7 | 3 | 7 | 11 | 10 | 5 | 5 | 5 | 6 | 75 | 0.74 | 2.04 | 27.67 | |
| 1873 | 6 | 11 | 6 | 12 | 6 | 12 | 11 | 10 | 9 | 11 | 5 | 8 | 107 | 1.12 | 2.82 | 25.16 | |
| 1874 | 6 | 7 | 12 | 4 | 12 | 6 | 16 | 10 | 6 | 7 | 15 | 8 | 109 | 1.35 | 2.76 | 20.29 | |
| 1875 | 10 | 7 | 9 | 6 | 13 | 11 | 15 | 14 | 11 | 10 | 7 | 9 | 122 | 1.54 | 3.07 | 19.72 | |
| 1876 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 122 | 1.42 | 2.99 | 21.02 | |
| 1877 | 6 | 11 | 17 | 8 | 11 | 14 | 8 | 13 | 5 | 16 | 14 | 7 | 130 | 1.62 | 3.02 | 18.68 | |
| 1878 | 10 | 9 | 19 | 10 | 9 | 17 | 18 | 26 | 20 | 16 | 13 | 10 | 177 | 2.38 | 4.05 | 16.99 | |
| 1879 | 13 | 7 | 14 | 15 | 16 | 20 | 15 | 23 | 20 | 10 | 11 | 13 | 177 | 2.05 | 3.57 | 17.52 | |
| 1880 | 10 | 10 | 15 | 19 | 16 | 8 | 16 | 12 | 9 | 12 | 18 | 18 | 163 | 1.56 | 3.24 | 20.79 | |
| 1881 | 22 | 12 | 17 | 14 | 13 | 12 | 20 | 37 | 18 | 14 | 18 | 20 | 217 | 1.56 | 4.02 | 25.60 | |
| 1882 | 19 | 11 | 28 | 8 | 21 | 20 | 25 | 30 | 23 | 11 | 14 | 10 | 220 | 1.66 | 3.95 | 23.60 | |
| 1883 | 18 | 17 | 16 | 19 | 18 | 19 | 23 | 23 | 21 | 24 | 18 | 16 | 232 | 2.01 | 4.00 | 19.92 | |
| 1884 | 15 | 25 | 27 | 20 | 18 | 16 | 30 | 27 | 21 | 19 | 27 | 20 | 265 | 2.12 | 4.21 | 19.80 | |
| 1885 | 30 | 18 | 20 | 22 | 23 | 17 | 26 | 16 | 14 | 18 | 21 | 24 | 249 | 2.00 | 3.74 | 18.76 | |
| 1886 | 14 | 8 | 12 | 21 | 15 | 21 | 21 | 26 | 27 | 22 | 18 | 25 | 300 | 1.68 | 3.27 | 19.43 | |
| 1887 | 21 | 24 | 27 | 18 | 22 | 21 | 37 | 33 | 22 | 21 | 27 | 28 | 301 | 1.95 | 3.96 | 20.27 | |
| 1888 | 30 | 19 | 26 | 31 | 35 | 35 | 31 | 31 | 28 | 33 | 30 | 32 | 361 | 2.29 | 4.49 | 19.65 | |
| 1889 | 29 | 20 | 36 | 17 | 35 | 27 | 35 | 26 | 37 | 35 | 41 | 41 | 379 | 2.24 | 4.05 | 17.56 | |
| 1890 | 39 | 32 | 33 | 38 | 40 | 37 | 40 | 45 | 46 | 38 | 36 | 37 | 461 | 2.11 | 3.81 | 18.09 | |
| 1891 | 37 | 52 | 43 | 42 | 38 | 42 | 38 | 58 | 39 | 55 | 45 | 56 | 545 | 1.96 | 4.36 | 22.20 | |
| 1892 | 63 | 43 | 41 | 42 | 56 | 42 | 39 | 47 | 40 | 41 | 44 | 41 | 539 | 2.06 | 3.75 | 18.23 | |
| 1893 | 51 | 51 | 46 | 55 | 42 | 42 | 54 | 61 | 59 | 51 | 47 | 50 | 609 | 2.25 | 3.81 | 16.92 | |
| 1894 | 47 | 35 | 38 | 54 | 57 | 49 | 56 | 61 | 63 | 59 | 52 | 68 | 639 | 2.67 | 4.07 | 15.24 | |
| 1895 | 50 | 54 | 50 | 53 | 61 | 57 | 67 | 57 | 62 | 58 | 48 | 65 | 682 | 2.82 | 4.26 | 15.14 | |
| 1896 | 59 | 51 | 55 | 59 | 63 | 68 | 78 | 73 | 45 | 66 | 51 | 66 | 734 | 3.16 | 4.53 | 14.36 | |

SMALLPOX.

Deaths as reported by months—Totals by years—Percentages of the mortality from all causes—Deaths per 10 000 of population—Annual death rates from all causes—For the years 1851 to 1895 inclusive.

| YEARS. | MONTHS. | | | | | | | | | | | | SMALLPOX MORTALITY. | | Annual death rates from all causes per 1000 of population. | |
|--------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|---------------------|---------------------------------|--|---------------------------|
| | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. | Percentages of total mortality. | | Per 10 000 of population. |
| 1851 | | | | | | | | 1 | | | 1 | | 2 | | | 36.60 |
| 1852 | 2 | | | | | | 2 | | | | | | 9 | 0.49 | 2.33 | 46.70 |
| 1853 | 2 | 2 | 1 | 2 | 2 | 4 | | 1 | | 1 | 1 | 3 | 19 | 1.43 | 3.21 | 22.40 |
| 1854 | 1 | 1 | 1 | 2 | 2 | | 2 | | | | 1 | 2 | 12 | 0.28 | 1.82 | 64.00 |
| 1855 | 8 | 6 | 2 | 5 | 1 | 1 | 2 | 1 | | | 1 | 3 | 30 | 1.37 | 3.75 | 27.20 |
| 1856 | 5 | 2 | 2 | 4 | 2 | 1 | | | | | 1 | | 16 | 0.76 | 1.90 | 24.80 |
| 1857 | 1 | | | 3 | 1 | 2 | | 2 | | | 1 | | 10 | 0.41 | 1.14 | 27.55 |
| 1858 | 1 | | | 1 | 1 | 2 | | | | | | | 5 | | | 24.72 |
| 1859 | | | | | | | | | | | | | | | | 21.30 |
| 1860 | | | | | | 1 | 1 | | | 1 | | | 3 | | | 20.70 |
| 1861 | 1 | 1 | | | | | | | 1 | | 2 | | 5 | | | 18.90 |
| 1862 | 1 | 1 | | | | | | | | | | 3 | 5 | | | 20.51 |
| 1863 | 4 | 9 | 8 | 9 | 7 | 11 | 4 | 4 | 7 | 10 | 16 | 26 | 115 | 2.96 | 7.66 | 25.80 |
| 1864 | 55 | 40 | 37 | 35 | 32 | 19 | 25 | 8 | 6 | 3 | 11 | 12 | 283 | 6.36 | 16.74 | 26.26 |
| 1865 | 8 | 18 | 17 | 4 | 5 | 3 | | 1 | 1 | | | | 57 | 1.55 | 3.20 | 22.50 |
| 1866 | 2 | | | | 1 | | 2 | 1 | 1 | | | 2 | 9 | | | 32.20 |
| 1867 | 1 | 5 | 3 | 8 | 3 | 4 | 8 | 11 | 13 | 20 | 19 | 28 | 123 | 2.64 | 5.46 | 21.10 |
| 1868 | 39 | 33 | 35 | 12 | 13 | 10 | 2 | | | | | 2 | 146 | 2.60 | 5.79 | 23.70 |
| 1869 | 1 | 1 | 2 | 2 | 3 | 2 | 2 | 1 | 3 | | | | 17 | 0.26 | 0.60 | 23.10 |
| 1870 | 1 | 1 | | 3 | 2 | 5 | 2 | 1 | | | | | 15 | 0.20 | 0.48 | 23.88 |
| 1871 | 2 | 2 | | 1 | 1 | 3 | 3 | | | 1 | 13 | 47 | 73 | 1.04 | 2.19 | 20.87 |
| 1872 | 65 | 54 | 97 | 80 | 68 | 60 | 26 | 29 | 20 | 27 | 63 | 66 | 655 | 6.45 | 17.80 | 27.67 |
| 1873 | 64 | 53 | 35 | 44 | 56 | 45 | 52 | 31 | 33 | 32 | 36 | 36 | 517 | 5.40 | 13.61 | 25.16 |
| 1874 | 24 | 11 | 8 | 17 | 14 | 7 | 7 | 1 | 1 | | | | 90 | 1.11 | 2.27 | 20.29 |
| 1875 | | 2 | 3 | 3 | 1 | 1 | | | | | | | 10 | 0.12 | 0.25 | 19.72 |
| 1876 | | | | | | | | | | | | | 29 | 0.33 | 0.71 | 21.02 |
| 1877 | | | 1 | 3 | 2 | 2 | 4 | 7 | 7 | 4 | 5 | 8 | 43 | 0.53 | 1.00 | 18.68 |
| 1878 | 7 | 5 | 2 | 4 | | | 3 | | | | | | 21 | 0.28 | 0.48 | 16.99 |
| 1879 | | | | | | | | | | | | 1 | 1 | | | 17.52 |
| 1880 | | | | 9 | 4 | 10 | 3 | 1 | 2 | 3 | 1 | 10 | 43 | 0.41 | 0.85 | 20.79 |
| 1881 | 29 | 34 | 31 | 39 | 60 | 37 | 50 | 116 | 116 | 188 | 206 | 274 | 1180 | 8.50 | 21.85 | 25.60 |
| 1882 | 345 | 281 | 262 | 150 | 111 | 49 | 24 | 4 | 5 | 21 | 19 | 21 | 1292 | 9.79 | 23.07 | 23.60 |
| 1883 | 13 | 10 | 9 | 7 | 4 | 3 | | | | | | | 46 | 0.40 | 0.79 | 19.92 |
| 1884 | | | | 2 | | | | | | | | | 2 | | | 19.80 |
| 1885 | | 2 | 1 | | | | | | | 1 | 1 | 3 | 8 | | | 18.76 |
| 1886 | 2 | | | | | | | | | | | | 2 | | | 19.43 |
| 1887 | | | | | | 2 | | | | | | | 2 | | | 20.27 |
| 1888 | | | | | | | | | | | | | | | | 19.65 |
| 1889 | | | | | 1 | 1 | | | | | | | 2 | | | 17.56 |
| 1890 | | | | | | | | | | | | | | | | 18.09 |
| 1891 | | | | | | | | | | | | | | | | 22.20 |
| 1892 | | | | | 1 | 1 | | 1 | 1 | 4 | 2 | | 2 | | | 18.23 |
| 1893 | | 1 | | | | 1 | | | 1 | 1 | 2 | 13 | 23 | 0.08 | 0.14 | 16.92 |
| 1894 | 29 | 55 | 100 | 157 | 253 | 171 | 51 | 53 | 31 | 40 | 51 | 42 | 1033 | 4.32 | 6.58 | 15.24 |
| 1895 | 56 | 23 | 33 | 14 | 15 | 2 | 3 | 7 | 2 | | | 2 | 157 | 0.65 | 0.98 | 15.14 |

DEATHS FROM SMALLPOX, TYPHUS FEVER, PUERPERAL FEVER AND MALARIAL FEVERS, BY YEARS: 1858-1896.



TYPHUS FEVER.

Deaths as reported by months—Totals by years—Percentages of the mortality from all causes—Deaths per 10000 of population—Annual death rates from all causes—For the years 1851 to 1886 inclusive.

| YEARS. | MONTHS. | | | | | | | | | | | | TYPHUS FEVER MORTALITY. | | Annual death rates from all causes per 1000 of population. | |
|--------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|-------------------------------|---------------------------------------|--|------------------------------|
| | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. | Percentages of total mortality. | | Per 10 000 of population. |
| 1851 | | | | | | | | 2 | | | 1 | 1 | 4 | 0.43 | 1.18 | 36.60 |
| 1852 | | | | | 1 | 3 | 1 | 2 | 2 | | 1 | 1 | 11 | 0.61 | 2.84 | 46.70 |
| 1853 | | | | | | | | | | | | | | | | 22.40 |
| 1854 | | | | 1 | | 1 | 2 | 6 | 6 | 3 | 3 | | 22 | 0.52 | 3.34 | 64.00 |
| 1855 | | | | | | | | 1 | 4 | 2 | | | 7 | 0.32 | 0.87 | 27.20 |
| 1856 | | 2 | | | 2 | | 1 | 3 | 4 | 10 | 1 | 3 | 26 | 1.25 | 3.10 | 24.80 |
| 1857 | 3 | 3 | 4 | | 1 | 3 | 3 | 1 | 3 | 5 | | 4 | 30 | 1.24 | 3.42 | 27.55 |
| 1858 | 2 | 2 | | | | | | 1 | | | 1 | | 6 | 0.27 | 0.66 | 24.72 |
| 1859 | | | | | | 1 | | 1 | 2 | 1 | 1 | | 6 | 0.29 | 0.64 | 21.30 |
| 1860 | | | | | 1 | 1 | 1 | | | | | | 3 | 0.13 | 0.27 | 20.70 |
| 1861 | | | | | | | | | | | | | | | | 18.90 |
| 1862 | | | | | | | | | | | | | | | | 20.51 |
| 1863 | | | | | | | | | | | | | | | | 25.80 |
| 1864 | 1 | 6 | 6 | 1 | | | | | 6 | 5 | 2 | | 27 | 0.61 | 1.60 | 26.26 |
| 1865 | | | | | | | | | | | | | | | | 22.50 |
| 1866 | | | 3 | 2 | 1 | | 1 | 1 | | 1 | | 1 | 10 | 0.18 | 0.50 | 32.20 |
| 1867 | 1 | | 2 | 1 | 3 | 3 | 2 | 6 | 4 | 3 | 5 | 2 | 32 | 0.69 | 1.42 | 21.10 |
| 1868 | | | 2 | 1 | 1 | | | | 1 | | | | 6 | 0.10 | 0.24 | 23.70 |
| 1869 | | | | | | 1 | 1 | 2 | 1 | | | | 6 | 0.09 | 0.21 | 23.10 |
| 1870 | | | | | | | | 2 | 1 | | | | 3 | 0.04 | 0.10 | 23.88 |
| 1871 | | | | | | | | | | | | | | | | 20.87 |
| 1872 | | | | | | | | | | | | | | | | 27.67 |
| 1873 | | | | | | | | | | | | | | | | 25.16 |
| 1874 | | | | | | | | | | | | | | | | 20.29 |
| 1875 | | | | | | | | | | | | | | | | 19.72 |
| 1876 | | | | | | | | | | | | | | | | 21.02 |
| 1877 | | | | | | | | | | | | | | | | 18.68 |
| 1878 | | | | | | | | | | | | | | | | 16.99 |
| 1879 | | | | | | | | | | | | 1 | 1 | 0.01 | 0.02 | 17.52 |
| 1880 | 1 | 4 | 1 | | 2 | 1 | 1 | 1 | | | | | 11 | 0.11 | 0.22 | 20.79 |
| 1881 | 1 | 1 | 1 | | 1 | | | 1 | 5 | 2 | 2 | 2 | 16 | 0.12 | 0.30 | 25.60 |
| 1882 | 2 | | | | | 2 | | | 1 | | | | 5 | 0.04 | 0.09 | 23.60 |
| 1883 | | | 1 | | | | | | 1 | | | | 2 | 0.02 | 0.03 | 19.92 |
| 1884 | 1 | | | | | 1 | | | | 1 | | | 3 | 0.03 | 0.05 | 19.80 |
| 1885 | | | | | | | | 2 | 3 | 1 | 1 | | 7 | 0.06 | 0.11 | 18.76 |
| 1886 | 1 | 1 | 1 | 1 | | | | | | 1 | | | 4 | 0.03 | 0.06 | 19.43 |

NOTE.—There has been no death reported from *Typhus fever* since April, 1886.

PUERPERAL FEVER.

Deaths as reported by months—Totals by years—Percentages of the mortality from all causes—Deaths per 1000 confinements [a—Annual death rates from all causes—For the years 1851 to 1896 inclusive.

| YEARS. | MONTHS. | | | | | | | | | | | | PUERPERAL MORTALITY. | | Annual death rates from all causes per 1000 of population. |
|----------------------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|----------------------|---------------------------------|--|
| | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. | Percentages of total mortality. |  | Per 1000 confinements. [a] |
| 1851..... | | | | | | | | 1 | | | | | 1 | 0.11 | 36.60 |
| 1852..... | | | | | | | | | | | | 1 | 1 | 0.05 | 46.70 |
| 1853..... | | | | | | | | | | 1 | | | 1 | 0.08 | 22.40 |
| 1854..... | | | | | | | | | | | | | | | 64.00 |
| 1855..... | | | 1 | | | | | | | | | | 1 | 0.05 | 27.20 |
| 1856..... | | | | 1 | 1 | 1 | | 1 | 1 | 1 | | | 6 | 0.29 | 24.88 |
| 1857..... | | 3 | 3 | 2 | 7 | | 2 | 2 | 6 | 1 | 1 | 1 | 33 | 1.37 | 27.55 |
| 1858..... | | 3 | 7 | 7 | 8 | 6 | 2 | 4 | 2 | 2 | 3 | 3 | 47 | 2.11 | 24.72 |
| 1859..... | | 6 | 3 | 1 | 5 | 1 | 1 | 1 | 2 | 5 | 3 | 4 | 33 | 1.64 | 21.30 |
| 1860..... | | | 5 | | | 2 | 1 | 1 | 1 | | | | 10 | 0.44 | 20.70 |
| 1861..... | 1 | 1 | | | | | 1 | | | | | | 3 | 0.13 | 18.90 |
| 1862..... | 1 | | | 1 | 3 | 1 | 2 | 1 | | | 1 | | 10 | 0.35 | 20.51 |
| 1863..... | 2 | | | 1 | 4 | 1 | | | | | | 2 | 10 | 0.26 | 25.80 |
| 1864..... | 4 | 5 | 1 | 8 | 2 | 1 | 1 | | | 1 | 3 | | 26 | 0.58 | 26.26 |
| 1865..... | 4 | 3 | | | 1 | 1 | 1 | | | | | | 10 | 0.27 | 22.50 |
| 1866..... | | | 2 | 2 | 2 | 3 | 1 | 2 | 2 | | | 2 | 18 | 0.30 | 32.20 |
| 1867..... | 1 | | | 1 | 1 | 7 | 2 | 4 | 4 | 5 | | | 4 | 0.29 | 21.10 |
| 1868..... | 2 | 5 | 4 | 7 | 1 | 2 | 5 | 2 | 1 | 2 | 3 | 5 | 39 | 0.65 | 23.70 |
| 1869..... | 5 | 6 | 5 | 3 | 4 | 5 | 3 | 7 | 4 | 5 | 7 | 6 | 60 | 0.92 | 23.10 |
| 1870..... | 4 | 8 | 8 | 5 | 2 | 4 | 9 | 5 | 2 | 1 | 3 | 4 | 55 | 0.75 | 23.88 |
| 1871..... | 11 | 4 | 6 | 5 | 6 | 6 | 6 | | | 5 | 8 | 11 | 68 | 0.97 | 20.87 |
| 1872..... | 16 | 14 | 12 | 11 | 6 | 9 | 10 | 9 | 13 | 10 | 7 | 14 | 131 | 1.29 | 27.67 |
| 1873..... | 22 | 14 | 31 | 12 | 5 | 9 | 6 | 8 | 5 | 4 | 10 | 7 | 133 | 1.38 | 25.16 |
| 1874..... | 7 | 10 | 7 | 11 | 4 | 5 | 7 | 3 | | 1 | 2 | 7 | 64 | 0.79 | 20.29 |
| 1875..... | 8 | 8 | 8 | 7 | 7 | 2 | 4 | 2 | | 5 | 5 | 1 | 57 | 0.72 | 19.72 |
| 1876..... | | | | | | | | | | | | | 49 | 0.57 | 21.02 |
| 1877..... | 4 | 5 | 9 | 6 | 3 | 1 | 6 | | 5 | | 1 | 3 | 43 | 0.54 | 18.68 |
| 1878..... | 2 | 8 | 6 | | 6 | 7 | 4 | 5 | 1 | 3 | 6 | 10 | 58 | 0.78 | 16.99 |
| 1879..... | 7 | 8 | 7 | 6 | 8 | 2 | 4 | 3 | 4 | 2 | 5 | 3 | 59 | 0.68 | 17.52 |
| 1880..... | 7 | 5 | 4 | 8 | 1 | 1 | 6 | 2 | 1 | 4 | 9 | 21 | 69 | 0.66 | 20.79 |
| 1881 <i>b</i>]..... | 19 | 24 | 11 | 11 | 20 | 10 | 7 | 7 | 16 | 7 | 5 | 7 | 144 | 1.03 | 7.31 |
| 1882..... | 4 | 9 | 16 | 11 | 6 | 9 | 9 | 9 | 3 | 6 | 8 | 17 | 107 | 0.81 | 5.16 |
| 1883..... | 17 | 25 | 18 | 17 | 13 | 6 | 17 | 5 | 9 | 13 | 6 | 6 | 152 | 1.32 | 7.08 |
| 1884..... | 13 | 14 | 16 | 12 | 6 | 9 | 5 | 3 | 6 | 7 | 8 | 9 | 108 | 0.86 | 4.57 |
| 1885..... | 13 | 13 | 15 | 16 | 7 | 4 | 4 | 10 | 6 | 5 | 7 | 7 | 107 | 0.86 | 4.23 |
| 1886..... | 15 | 23 | 18 | 10 | 12 | 4 | 10 | 7 | 9 | 3 | 7 | 8 | 126 | 0.92 | 4.41 |
| 1887..... | 10 | 8 | 15 | 23 | 12 | 8 | 9 | 10 | 9 | 13 | 18 | 14 | 149 | 0.91 | 5.16 |
| 1888..... | 25 | 44 | 21 | 22 | 8 | 15 | 10 | 11 | 6 | 6 | 10 | 7 | 186 | 1.18 | 6.10 |
| 1889..... | 17 | 10 | 18 | 12 | 9 | 1 | 13 | 9 | 10 | 9 | 14 | 15 | 137 | 0.81 | 3.65 |
| 1890..... | 17 | 17 | 18 | 12 | 13 | 19 | 10 | 7 | 11 | 15 | 15 | 12 | 166 | 0.76 | 3.55 |
| 1891..... | 27 | 19 | 26 | 18 | 11 | 8 | 7 | 16 | 10 | 3 | 6 | 25 | 176 | 0.63 | 3.64 |
| 1892..... | 22 | 25 | 21 | 15 | 22 | 11 | 17 | 12 | 8 | 6 | 7 | 8 | 174 | 0.66 | 3.13 |
| 1893..... | 13 | 13 | 25 | 16 | 15 | 14 | 24 | 9 | 14 | 15 | 4 | 19 | 181 | 0.67 | 3.31 |
| 1894..... | 31 | 14 | 20 | 13 | 13 | 13 | 31 | 13 | 15 | 11 | 17 | 23 | 214 | 0.89 | 3.22 |
| 1895..... | 13 | 19 | 12 | 11 | | 12 | 4 | 10 | 10 | 16 | 11 | 22 | 140 | 0.58 | 3.07 |
| 1896..... | 15 | 19 | 15 | 23 | 13 | 10 | 8 | 15 | 8 | 5 | 8 | 7 | 146 | 0.63 | 2.98 |

a] Multiple births counted as single confinements. b] Data concerning births are available only since 1881.

ERYSIPELAS.

Deaths as reported by months—Totals by years—Percentages of the mortality from all causes—Deaths per 10 000 of population—Annual death rates from all causes—For the years 1851 to 1896 inclusive.

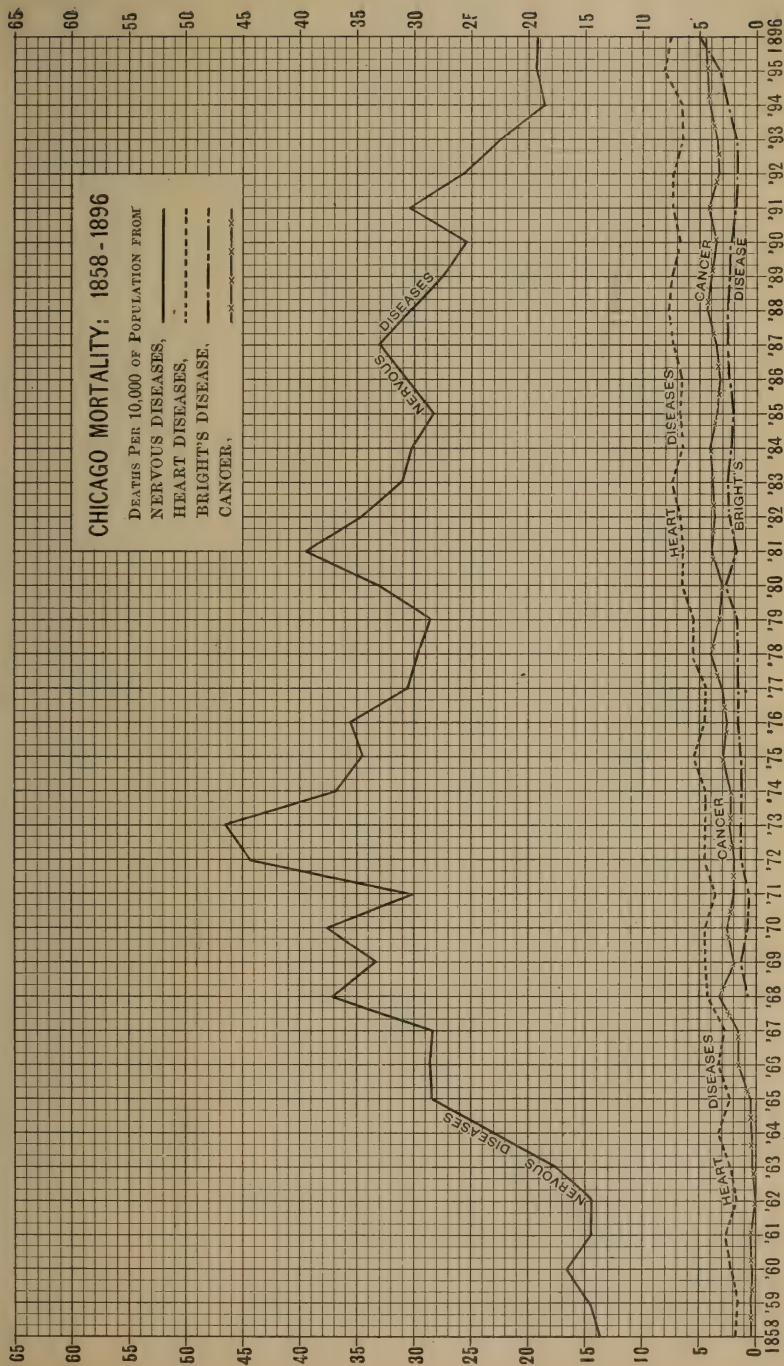
| YEARS. | MONTHS. | | | | | | | | | | | | ERYSIPELAS MORTALITY. | | Annual death rates from all causes per 100 of population. | |
|--------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|-----------------------|---------------------------------|---|---------------------------|
| | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. | Percentages of total mortality. | | Per 10 000 of population. |
| 1851 | | | | | | | 1 | | | | | | 1 | 0.01 | 0.29 | 36.60 |
| 1852 | | 1 | | 1 | 1 | | | | | 1 | | 1 | 5 | 0.28 | 1.32 | 46.70 |
| 1853 | | 1 | 2 | 3 | | | | | 1 | 1 | 1 | 1 | 10 | 0.76 | 1.69 | 22.40 |
| 1854 | | | 2 | 1 | | 1 | 1 | 2 | | | | | 7 | 0.17 | 1.08 | 64.00 |
| 1855 | | | | 1 | 1 | 1 | | | | | | | 3 | 0.14 | 0.37 | 27.20 |
| 1856 | | | | | 1 | | | | | | | | 1 | 0.05 | 0.12 | 24.80 |
| 1857 | | | 2 | 1 | 1 | 1 | | | | | | 1 | 6 | 0.25 | 0.69 | 27.55 |
| 1858 | | | 1 | | 1 | | 1 | | 1 | | | | 4 | 0.18 | 0.44 | 24.72 |
| 1859 | | 1 | | 1 | 1 | | | | | | | 1 | 4 | 0.20 | 0.43 | 21.30 |
| 1860 | | | 1 | | | 1 | | 2 | | | | | 4 | 0.18 | 0.37 | 20.70 |
| 1861 | 1 | | | | | | | | | | | 1 | 3 | 0.14 | 0.25 | 18.90 |
| 1862 | | 1 | | 2 | | | | | 1 | | | | 5 | 0.18 | 0.36 | 20.51 |
| 1863 | 2 | 3 | 1 | | 4 | 2 | 1 | | | | | 5 | 18 | 0.47 | 1.20 | 25.80 |
| 1864 | 5 | 8 | 4 | 4 | 5 | 3 | | 1 | | 1 | 2 | 1 | 34 | 0.77 | 2.01 | 26.26 |
| 1865 | 2 | 2 | 2 | 3 | 3 | 2 | 1 | | | 1 | 3 | 1 | 20 | 0.56 | 1.12 | 22.50 |
| 1866 | 3 | 1 | 2 | 1 | 4 | 2 | | 1 | | 1 | 3 | 3 | 21 | 0.36 | 1.05 | 32.20 |
| 1867 | 2 | 2 | 1 | | 1 | 4 | 1 | | 1 | | 2 | 1 | 15 | 0.33 | 0.67 | 21.10 |
| 1868 | | | 1 | 3 | 1 | 2 | 2 | 4 | | 3 | 6 | | 22 | 0.37 | 0.87 | 23.70 |
| 1869 | 5 | 4 | 4 | 2 | | 2 | 2 | 2 | 2 | 2 | 2 | 6 | 33 | 0.51 | 1.18 | 23.10 |
| 1870 | 2 | | 6 | 5 | 6 | 1 | 4 | | 2 | | 2 | 2 | 30 | 0.41 | 0.98 | 23.88 |
| 1871 | 4 | 5 | 3 | 1 | 3 | 3 | 4 | | | 3 | 3 | 4 | 33 | 0.48 | 0.98 | 20.87 |
| 1872 | 4 | 4 | 7 | 3 | 4 | 10 | 3 | 4 | 4 | 2 | 8 | 8 | 61 | 0.60 | 1.66 | 27.67 |
| 1873 | 13 | 11 | 6 | 8 | 5 | 4 | 5 | 4 | 4 | | 3 | 3 | 66 | 0.69 | 1.73 | 25.16 |
| 1874 | 3 | 9 | 7 | 4 | 7 | 4 | 4 | 3 | 1 | 3 | 2 | 4 | 51 | 0.64 | 1.29 | 20.29 |
| 1875 | 5 | 5 | 4 | 3 | 1 | 4 | 2 | 1 | 3 | | 5 | 4 | 37 | 0.47 | 0.92 | 19.72 |
| 1876 | | | | | | | | | | | | | 33 | 0.38 | 0.81 | 21.02 |
| 1877 | 7 | 5 | 2 | 8 | 4 | 2 | 4 | | 1 | | 1 | 3 | 37 | 0.46 | 0.86 | 18.68 |
| 1878 | | 2 | 8 | 4 | 1 | 2 | 4 | 2 | 1 | | 8 | 8 | 40 | 0.54 | 0.92 | 16.99 |
| 1879 | 4 | 4 | 6 | 8 | 5 | 3 | 2 | 3 | 2 | 3 | 2 | 6 | 48 | 0.56 | 0.98 | 17.52 |
| 1880 | 1 | 4 | 4 | 6 | 5 | 5 | | 3 | 5 | | 7 | 9 | 49 | 0.47 | 0.97 | 20.79 |
| 1881 | 11 | 15 | 6 | 6 | 3 | 3 | 3 | 4 | 6 | 3 | 4 | 4 | 68 | 0.49 | 1.26 | 25.60 |
| 1882 | 5 | 4 | 4 | 3 | 4 | 6 | 2 | 6 | 2 | 4 | 4 | 7 | 51 | 0.39 | 0.91 | 23.60 |
| 1883 | 5 | 9 | 11 | 9 | 6 | 2 | 3 | 2 | 1 | 3 | 1 | 6 | 58 | 0.50 | 1.00 | 19.92 |
| 1884 | 9 | 6 | 11 | 6 | 5 | 4 | 2 | 1 | 2 | 3 | 4 | 3 | 56 | 0.45 | 0.89 | 19.80 |
| 1885 | 3 | 4 | 10 | 8 | 5 | 2 | 5 | 3 | | 5 | 2 | 2 | 49 | 0.39 | 0.74 | 18.76 |
| 1886 | 6 | 6 | 9 | 6 | 8 | 3 | 1 | 5 | 2 | 6 | 2 | 4 | 58 | 0.42 | 0.82 | 19.43 |
| 1887 | 14 | 8 | 5 | 7 | 7 | 6 | 3 | 3 | 2 | 3 | 2 | 9 | 69 | 0.45 | 0.91 | 20.27 |
| 1888 | 17 | 13 | 16 | 5 | 9 | 2 | 3 | 6 | 2 | | 7 | 6 | 86 | 0.55 | 1.07 | 19.65 |
| 1889 | 8 | 5 | 3 | 7 | 9 | 7 | 4 | 1 | 5 | 2 | 3 | 4 | 58 | 0.34 | 0.62 | 17.56 |
| 1890 | 1 | 8 | 7 | 7 | 7 | 7 | 4 | 4 | 4 | 1 | 12 | 13 | 75 | 0.34 | 0.62 | 18.09 |
| 1891 | 12 | 10 | 21 | 9 | 8 | 7 | 1 | 5 | 3 | 8 | 3 | 12 | 99 | 0.36 | 0.79 | 22.20 |
| 1892 | 12 | 15 | 13 | 8 | 9 | 8 | 6 | 1 | 7 | 7 | 3 | 5 | 94 | 0.36 | 0.65 | 18.23 |
| 1893 | 10 | 11 | 8 | 12 | 12 | 6 | 4 | 5 | 3 | 4 | 9 | 7 | 91 | 0.34 | 0.57 | 16.92 |
| 1894 | 7 | 10 | 3 | 9 | 10 | 5 | 5 | 2 | 6 | 2 | 4 | 9 | 72 | 0.30 | 0.46 | 15.24 |
| 1895 | 14 | 4 | 7 | 15 | 11 | 4 | 3 | 5 | 4 | 5 | 10 | 9 | 91 | 0.38 | 0.57 | 15.14 |
| 1896 | 7 | 9 | 10 | 10 | 9 | 4 | 2 | 1 | 6 | 4 | 3 | 8 | 73 | 0.31 | 0.45 | 14.44 |

MALARIAL FEVER.

Deaths as reported by months—Totals by years—Percentages of the mortality from all causes—Deaths per 10 000 of population—Annual death rates from all causes—For the years 1851 to 1896 inclusive.

| YEARS. | MONTHS. | | | | | | | | | | | | MALARIAL FEVER MORTALITY. | | Annual death rates from all causes per 1000 of population. | |
|-----------|----------|-----------|--------|--------|------|-------|-------|---------|------------|----------|-----------|-----------|---------------------------|---------------------------------|--|---------------------------|
| | January. | February. | March. | April. | May. | June. | July. | August. | September. | October. | November. | December. | Total. | Percentages of total mortality. | | Per 10 000 of population. |
| 1851..... | | | | | | | | 6 | 4 | 5 | 2 | .... | 17 | 1.08 | 5.00 | 36.60 |
| 1852..... | | 2 | | 1 | 1 | 3 | | 4 | 10 | 11 | 6 | .... | 38 | 2.10 | 9.81 | 46.70 |
| 1853..... | | | 1 | 1 | 1 | 2 | 2 | 2 | 18 | 2 | 1 | 4 | 34 | 2.56 | 5.75 | 22.40 |
| 1854..... | | 1 | .... | 1 | 2 | 11 | 12 | 17 | 10 | 9 | 5 | 2 | 70 | 1.65 | 10.63 | 64.00 |
| 1855..... | 3 | 1 | | 2 | 3 | | 1 | 4 | 7 | 5 | .... | .... | 30 | 1.37 | 3.75 | 27.20 |
| 1856..... | | | 1 | 4 | .... | 2 | | 3 | 3 | 3 | 5 | 1 | 22 | 1.05 | 2.61 | 24.80 |
| 1857..... | | | 5 | 1 | .... | 2 | 3 | 13 | 4 | 4 | 10 | 5 | 47 | 1.94 | 5.36 | 27.55 |
| 1858..... | | 1 | 2 | 1 | .... | 1 | 1 | 2 | 3 | .... | 2 | 3 | 16 | 0.71 | 1.77 | 24.72 |
| 1859..... | | | | 3 | 2 | | 1 | 1 | 1 | 2 | 1 | .... | 10 | 0.49 | 1.07 | 21.30 |
| 1860..... | | 3 | 1 | 1 | 1 | 4 | 3 | 4 | 7 | 1 | .... | .... | 24 | 1.06 | 2.20 | 20.70 |
| 1861..... | | | 2 | 2 | 3 | | 2 | 3 | 2 | | 1 | .... | 15 | 0.65 | 1.25 | 18.90 |
| 1862..... | 2 | | | 2 | 2 | 3 | | 2 | .... | 3 | 5 | .... | 19 | 0.67 | 1.38 | 20.51 |
| 1863..... | 1 | 3 | 1 | 2 | 2 | 1 | 4 | 2 | 1 | 7 | 2 | 1 | 27 | 0.69 | 1.80 | 25.80 |
| 1864..... | 8 | 4 | 6 | .... | 4 | 1 | 2 | 1 | 4 | .... | .... | 2 | 32 | 0.71 | 1.88 | 26.26 |
| 1865..... | | 1 | 1 | 6 | 4 | .... | 3 | 5 | 11 | 8 | 4 | .... | 43 | 1.17 | 2.41 | 22.50 |
| 1866..... | 1 | 5 | 1 | 2 | 2 | 7 | | 10 | 16 | 17 | 8 | 4 | 74 | 1.24 | 3.69 | 32.20 |
| 1867..... | 4 | 5 | 9 | .... | 3 | 3 | 1 | 4 | 5 | 3 | 1 | 1 | 39 | 0.83 | 1.73 | 21.10 |
| 1868..... | 2 | 1 | 2 | 2 | | 1 | 3 | 6 | 1 | 4 | 7 | .... | 29 | 0.48 | 1.15 | 23.70 |
| 1869..... | | 1 | 3 | 2 | 1 | 2 | 3 | 1 | 3 | 7 | 4 | 5 | 32 | 0.49 | 1.14 | 23.10 |
| 1870..... | 2 | 5 | 2 | 4 | 1 | 3 | 5 | 7 | 3 | 5 | 8 | 4 | 49 | 0.66 | 1.59 | 23.88 |
| 1871..... | 3 | 3 | 5 | 2 | 2 | .... | 3 | .... | .... | 4 | 5 | 8 | 35 | 0.50 | 1.04 | 20.87 |
| 1872..... | 3 | 4 | 6 | .... | 3 | 5 | 5 | 1 | 11 | 9 | 6 | 4 | 57 | 0.56 | 1.55 | 27.67 |
| 1873..... | 5 | 7 | 2 | 2 | 5 | 7 | 10 | 6 | 5 | 8 | 2 | 4 | 63 | 0.65 | 1.65 | 25.16 |
| 1874..... | 2 | 1 | 2 | 7 | 1 | 4 | 5 | 6 | 1 | 1 | 1 | .... | 31 | 0.38 | 0.78 | 20.29 |
| 1875..... | | 3 | 2 | 8 | 4 | 2 | 4 | 3 | 8 | 3 | 3 | 5 | 45 | 0.56 | 1.10 | 19.72 |
| 1876..... | | | | | | | | | | | | | 62 | 0.72 | 1.52 | 21.02 |
| 1877..... | | 3 | 1 | 1 | .... | 1 | 4 | 3 | 2 | 3 | .... | 2 | 20 | 0.24 | 0.48 | 18.68 |
| 1878..... | 3 | 4 | 4 | 6 | 3 | 5 | 3 | 8 | 8 | 9 | 3 | 3 | 59 | 0.79 | 1.35 | 16.99 |
| 1879..... | 3 | 4 | 2 | 7 | 2 | 2 | 3 | 13 | 5 | 6 | 2 | .... | 49 | 0.56 | 0.99 | 17.52 |
| 1880..... | 5 | 6 | 8 | 3 | 8 | 2 | 5 | 6 | 9 | 8 | 5 | 6 | 71 | 0.67 | 1.41 | 20.79 |
| 1881..... | 8 | 8 | 8 | 8 | 11 | 4 | 7 | 13 | 25 | 13 | 10 | 9 | 124 | 0.89 | 2.29 | 25.60 |
| 1882..... | 13 | 9 | 7 | 6 | 5 | 2 | 4 | 11 | 9 | 10 | 9 | 4 | 89 | 0.67 | 1.58 | 23.60 |
| 1883..... | 6 | 6 | 7 | 9 | 8 | 13 | 9 | 5 | 12 | 6 | 6 | 8 | 95 | 0.82 | 1.63 | 19.92 |
| 1884..... | 10 | 4 | 9 | 10 | 8 | 6 | 10 | 8 | 6 | 9 | 12 | 6 | 98 | 0.78 | 1.55 | 19.80 |
| 1885..... | 3 | 5 | 12 | 5 | 12 | 10 | 19 | 11 | 12 | 8 | 10 | 4 | 111 | 0.88 | 1.66 | 18.76 |
| 1886..... | 7 | 14 | 8 | 12 | 3 | 5 | 8 | 16 | 12 | 10 | 15 | 8 | 118 | 0.86 | 1.67 | 19.43 |
| 1887..... | 11 | 5 | 8 | 9 | 6 | 2 | 12 | 6 | 3 | 10 | 11 | 3 | 87 | 0.56 | 1.14 | 20.27 |
| 1888..... | 4 | 5 | 7 | 12 | 11 | 6 | 9 | 12 | 13 | 6 | 6 | 5 | 96 | 0.60 | 1.19 | 19.65 |
| 1889..... | 3 | 7 | 7 | 5 | 5 | 3 | 10 | 8 | 7 | 12 | 22 | 16 | 105 | 0.61 | 1.12 | 17.56 |
| 1890..... | 8 | 11 | 12 | 9 | 15 | 9 | 7 | 16 | 9 | 10 | 7 | 8 | 121 | 0.55 | 1.00 | 18.09 |
| 1891..... | 7 | 9 | 16 | 18 | 22 | 7 | 10 | 14 | 8 | 12 | 10 | 10 | 143 | 0.51 | 1.14 | 22.20 |
| 1892..... | 9 | 8 | 9 | 5 | 10 | 16 | 21 | 27 | 13 | 8 | 6 | 7 | 139 | 0.53 | 0.96 | 18.23 |
| 1893..... | 5 | 4 | 4 | 13 | 8 | 5 | 5 | 5 | 8 | 11 | 8 | 7 | 83 | 0.30 | 0.51 | 16.92 |
| 1894..... | 5 | 1 | 2 | 4 | 8 | 2 | 1 | 1 | 5 | 4 | 4 | 2 | 34 | 0.10 | 0.21 | 15.24 |
| 1895..... | 5 | 3 | 4 | 3 | 7 | 2 | 2 | 5 | 6 | 3 | 7 | 4 | 56 | 0.23 | 0.35 | 15.14 |
| 1896..... | 6 | 3 | 5 | 2 | 2 | 2 | 3 | 3 | 2 | 1 | 2 | 1 | 32 | 0.14 | 0.20 | 14.36 |

DEATHS FROM NERVOUS DISEASES, HEART DISEASES, BRIGHT'S DISEASE AND CANCER, BY YEARS: 1858-1896.



NERVOUS DISEASES, HEART DISEASES, BRIGHT'S DISEASE, CHILD MORTALITY.

Deaths from diseases of the nervous system, from diseases of the heart and from chronic nephritis—Deaths of infants and children under 5 years of age—Total deaths by years—Deaths per 10 000 of population—Annual death rates from all causes—For the years 1851 to 1896 inclusive.

| YEARS. | DEATHS FROM NERVOUS DISEASES. | | DEATHS FROM HEART DISEASES. | | DEATHS FROM BRIGHT'S DISEASE. [a] | | DEATHS OF CHILDREN UNDER 5 YEARS OF AGE. | | Annual death rates from all causes per 1000 of population. |
|-----------|-------------------------------|----------------------------------|-----------------------------|----------------------------------|-----------------------------------|----------------------------------|--|----------------------------------|--|
| | Total deaths. | Deaths per 10 000 of population. | Total deaths. | Deaths per 10 000 of population. | Total deaths. | Deaths per 10 000 of population. | Total deaths. | Deaths per 10 000 of population. | |
| 1851..... | 38 | 11.18 | 3 | 0.88 | ..... | ..... | 362 | 106.47 | 36.60 |
| 1852..... | 74 | 19.13 | 3 | 0.77 | ..... | ..... | 561 | 143.87 | 46.70 |
| 1853..... | 96 | 16.27 | 5 | 0.85 | ..... | ..... | 585 | 99.15 | 22.40 |
| 1854..... | 128 | 19.40 | 5 | 2.27 | ..... | ..... | 1256 | 190.30 | 64.00 |
| 1855..... | 110 | 13.75 | 19 | 2.37 | ..... | ..... | 883 | 110.38 | 27.20 |
| 1856..... | 110 | 13.07 | 7 | 0.83 | ..... | ..... | 999 | 118.93 | 24.80 |
| 1857..... | 124 | 14.16 | 12 | 1.37 | ..... | ..... | 1270 | 144.97 | 27.55 |
| 1858..... | 124 | 13.78 | 17 | 1.90 | ..... | ..... | 1175 | 130.55 | 24.72 |
| 1859..... | 136 | 14.62 | 17 | 1.83 | ..... | ..... | 1040 | 111.83 | 21.30 |
| 1860..... | 182 | 16.70 | 22 | 2.02 | ..... | ..... | 1148 | 105.32 | 20.70 |
| 1861..... | 173 | 14.42 | 32 | 2.67 | ..... | ..... | 1136 | 94.66 | 18.90 |
| 1862..... | 203 | 14.71 | 26 | 1.90 | ..... | ..... | 1418 | 102.75 | 20.51 |
| 1863..... | 264 | 17.60 | 32 | 2.13 | ..... | ..... | 1718 | 119.20 | 25.80 |
| 1864..... | 394 | 23.31 | 52 | 3.08 | ..... | ..... | 2081 | 122.41 | 26.26 |
| 1865..... | 503 | 28.26 | 39 | 2.18 | ..... | ..... | 1932 | 108.54 | 22.50 |
| 1866..... | 571 | 28.55 | 61 | 3.05 | ..... | ..... | 2899 | 144.95 | 32.20 |
| 1867..... | 635 | 28.22 | 64 | 2.84 | ..... | ..... | 2498 | 111.02 | 21.10 |
| 1868..... | 933 | 37.02 | 104 | 4.13 | 15 | 0.60 | 2530 | 140.40 | 23.70 |
| 1869..... | 936 | 33.43 | 119 | 4.25 | 29 | 1.04 | 2934 | 104.80 | 23.10 |
| 1870..... | 1152 | 37.65 | 133 | 4.35 | 28 | 0.91 | 4600 | 150.33 | 23.88 |
| 1871..... | 1007 | 30.15 | 128 | 3.83 | 25 | 0.75 | 4040 | 120.96 | 20.87 |
| 1872..... | 1643 | 44.77 | 163 | 4.44 | 44 | 1.20 | 5901 | 160.80 | 27.67 |
| 1873..... | 1673 | 46.50 | 174 | 4.58 | 46 | 1.20 | 5676 | 149.37 | 25.16 |
| 1874..... | 1456 | 36.86 | 175 | 4.43 | 43 | 1.09 | 4896 | 123.95 | 20.29 |
| 1875..... | 1388 | 34.70 | 209 | 5.22 | 48 | 1.20 | 4736 | 118.40 | 19.72 |
| 1876..... | 1442 | 35.43 | 180 | 4.42 | 60 | 1.62 | 4891 | 119.87 | 21.02 |
| 1877..... | 1312 | 30.51 | 179 | 4.16 | 61 | 1.42 | 4512 | 105.00 | 18.68 |
| 1878..... | 1308 | 29.93 | 245 | 5.62 | 66 | 1.51 | 4017 | 91.70 | 16.99 |
| 1879..... | 1400 | 28.92 | 264 | 5.38 | 81 | 1.65 | 4444 | 90.51 | 17.52 |
| 1880..... | 1678 | 33.36 | 321 | 6.38 | 131 | 2.60 | 5640 | 112.13 | 20.79 |
| 1881..... | 2134 | 39.52 | 335 | 6.20 | 102 | 1.90 | 7371 | 136.50 | 25.60 |
| 1882..... | 1913 | 34.16 | 364 | 6.50 | 121 | 2.16 | 6645 | 118.73 | 23.60 |
| 1883..... | 1798 | 31.00 | 421 | 7.26 | 143 | 2.47 | 5875 | 101.29 | 19.92 |
| 1884..... | 1900 | 30.16 | 388 | 6.16 | 142 | 2.25 | 6666 | 105.81 | 19.80 |
| 1885..... | 1874 | 28.18 | 460 | 6.92 | 127 | 1.91 | 6187 | 93.04 | 18.76 |
| 1886..... | 2141 | 30.41 | 453 | 6.43 | 159 | 2.26 | 6763 | 96.06 | 19.43 |
| 1887..... | 2510 | 33.03 | 549 | 7.22 | 174 | 2.29 | 7568 | 99.55 | 20.27 |
| 1888..... | 2408 | 30.02 | 618 | 7.71 | 192 | 2.39 | 7533 | 93.93 | 19.65 |
| 1889..... | 2570 | 27.49 | 674 | 7.21 | 194 | 2.07 | 8204 | 87.74 | 17.56 |
| 1890..... | 3113 | 25.77 | 816 | 6.75 | 245 | 2.03 | 9954 | 82.40 | 18.09 |
| 1891..... | 3843 | 30.74 | 929 | 7.43 | 229 | 1.83 | 12801 | 102.41 | 22.20 |
| 1892..... | 3717 | 25.85 | 1058 | 7.36 | 249 | 1.73 | 11662 | 81.10 | 18.23 |
| 1893..... | 3590 | 22.44 | 1067 | 6.67 | 257 | 1.61 | 12363 | 77.27 | 16.92 |
| 1894..... | 2959 | 18.86 | 1071 | 6.83 | 344 | 2.19 | 11019 | 73.47 | 15.24 |
| 1895..... | 3101 | 19.38 | 1306 | 8.16 | 511 | 3.19 | 10452 | 65.32 | 15.14 |
| 1896..... | 3018 | 18.63 | 1231 | 7.60 | 656 | 4.05 | 9713 | 59.96 | 14.36 |

a) The first death from "Bright's disease" was reported in May, 1864; 2 more were reported in June, 1865; 1 in April, and 2 in May, 1866; and 1 each in July, August, October, November and December, 1867. Thereafter the deaths from this cause were reported in appreciable numbers.

Meteorological Data

CHICAGO

1871-1896

TABULATION OF MONTHLY TEMPERATURES, CHICAGO: 1871-1896.

REPORT OF DEPARTMENT OF HEALTH.

29

| MONTHS. | | YEARS : 1871-1896 INCLUSIVE. | | | | | | | | | | | | | | | | | | | | | | | | Average monthly temperatures for 26 years. | |
|---|---------|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|------|
| | | 1871 | 1872 | 1873 | 1874 | 1875 | 1876 | 1877 | 1878 | 1879 | 1880 | 1881 | 1882 | 1883 | 1884 | 1885 | 1886 | 1887 | 1888 | 1889 | 1890 | 1891 | 1892 | 1893 | 1894 | | 1895 | 1896 |
| January .. | Max .. | 62 | 45 | 51 | 60 | 44 | 65 | 56 | 49 | 49 | 61 | 41 | 58 | 40 | 49 | 50 | 48 | 52 | 44 | 55 | 62 | 54 | 55 | 46 | 60 | 51 | 50 |
| | Mean .. | 30 | 25 | 20 | 28 | 16 | 33 | 22 | 32 | 21 | 40 | 19 | 29 | 16 | 19 | 19 | 22 | 16 | 15 | 29 | 31 | 30 | 20 | 12 | 28 | 18 | 27 |
| | Min ... | 10 | -12 | -16 | -6 | -20 | 4 | -4 | -1 | -18 | -19 | -13 | 1 | -17 | -18 | -13 | -14 | -15 | -17 | Zero | -5 | Zero | -5 | -16 | -9 | -9 | -9 |
| February .. | Max .. | 56 | 52 | 53 | 56 | 45 | 63 | 58 | 55 | 51 | 63 | 51 | 62 | 57 | 53 | 47 | 56 | 58 | 47 | 48 | 59 | 58 | 49 | 46 | 48 | 61 | 58 |
| | Mean .. | 32 | 25 | 24 | 30 | 15 | 32 | 37 | 36 | 27 | 35 | 25 | 39 | 23 | 28 | 18 | 29 | 26 | 23 | 20 | 32 | 29 | 30 | 22 | 23 | 17 | 27 |
| | Min ... | 6 | -2 | -12 | 9 | -13 | -3 | 21 | 17 | -6 | 12 | 8 | 10 | -9 | -14 | -6 | -7 | -18 | -11 | 3 | 2 | 9 | -4 | -15 | -9 | -15 | -9 |
| March | Max .. | 67 | 45 | 60 | 64 | 73 | 69 | 65 | 68 | 71 | 60 | 48 | 63 | 62 | 59 | 58 | 70 | 68 | 64 | 68 | 56 | 57 | 53 | 69 | 74 | 80 | 58 |
| | Mean .. | 40 | 28 | 33 | 36 | 31 | 34 | 29 | 45 | 41 | 38 | 32 | 40 | 32 | 34 | 31 | 37 | 32 | 30 | 38 | 30 | 31 | 31 | 33 | 41 | 32 | 31 |
| | Min ... | 32 | 8 | -12 | 17 | 9 | 10 | 5 | 25 | 16 | 19 | 11 | 22 | 10 | -1 | 4 | 15 | 9 | -1 | 20 | Zero | 7 | 5 | 9 | 9 | 9 | -6 |
| April | Max .. | 80 | 81 | 83 | 67 | 72 | 70 | 78 | 75 | 80 | 77 | 76 | 78 | 77 | 76 | 81 | 82 | 83 | 73 | 75 | 75 | 75 | 78 | 84 | 84 | 81 | 84 |
| | Mean .. | 50 | 46 | 43 | 39 | 43 | 47 | 47 | 52 | 47 | 44 | 42 | 47 | 44 | 47 | 46 | 49 | 46 | 47 | 46 | 47 | 46 | 44 | 44 | 44 | 47 | 53 |
| | Min ... | 36 | 27 | 25 | 22 | 17 | 32 | 27 | 32 | 27 | 27 | 17 | 25 | 28 | 31 | 27 | 23 | 19 | 30 | 29 | 28 | 23 | 23 | 27 | 31 | 29 | 18 |
| May | Max .. | 84 | 83 | 87 | 89 | 79 | 87 | 86 | 78 | 87 | 85 | 87 | 76 | 80 | 78 | 80 | 82 | 86 | 81 | 88 | 86 | 81 | 76 | 83 | 88 | 94 | 89 |
| | Mean .. | 56 | 54 | 52 | 58 | 54 | 59 | 57 | 55 | 58 | 65 | 61 | 51 | 53 | 56 | 53 | 57 | 60 | 53 | 57 | 52 | 53 | 52 | 52 | 56 | 59 | 66 |
| | Min ... | 38 | 38 | 38 | 35 | 27 | 35 | 33 | 38 | 38 | 37 | 34 | 36 | 40 | 42 | 32 | 36 | 34 | 42 | 32 | 36 | 34 | 35 | 37 | 37 | 35 | 32 |
| June | Max .. | 87 | 98 | 92 | 95 | 89 | 88 | 87 | 85 | 87 | 91 | 89 | 88 | 84 | 86 | 88 | 87 | 96 | 90 | 86 | 92 | 88 | 91 | 85 | 93 | 95 | 89 |
| | Mean .. | 66 | 66 | 68 | 70 | 63 | 68 | 67 | 65 | 64 | 71 | 63 | 64 | 64 | 64 | 63 | 66 | 67 | 67 | 62 | 70 | 66 | 64 | 68 | 71 | 70 | 67 |
| | Min ... | 56 | 51 | 44 | 46 | 40 | 47 | 45 | 50 | 43 | 52 | 46 | 42 | 48 | 47 | 42 | 49 | 48 | 43 | 42 | 52 | 44 | 43 | 48 | 40 | 50 | 50 |
| July | Max .. | 92 | 97 | 93 | 99 | 88 | 93 | 91 | 97 | 93 | 95 | 93 | 90 | 91 | 89 | 94 | 94 | 100 | 94 | 90 | 93 | 87 | 94 | 94 | 96 | 92 | 93 |
| | Mean .. | 71 | 72 | 69 | 75 | 69 | 74 | 74 | 75 | 76 | 73 | 69 | 71 | 69 | 73 | 72 | 73 | 72 | 75 | 73 | 70 | 72 | 72 | 74 | 73 | 70 | 73 |
| | Min ... | 59 | 52 | 50 | 60 | 56 | 57 | 57 | 59 | 60 | 57 | 55 | 55 | 51 | 54 | 53 | 55 | 61 | 56 | 54 | 56 | 55 | 53 | 60 | 54 | 50 | 56 |
| August | Max .. | 90 | 93 | 92 | 98 | 86 | 92 | 89 | 91 | 91 | 93 | 98 | 87 | 89 | 91 | 85 | 92 | 98 | 91 | 88 | 96 | 96 | 93 | 95 | 95 | 93 | 98 |
| | Mean .. | 71 | 71 | 71 | 73 | 68 | 74 | 72 | 74 | 72 | 73 | 75 | 71 | 68 | 68 | 68 | 69 | 69 | 71 | 68 | 69 | 71 | 70 | 71 | 72 | 73 | 73 |
| | Min ... | 54 | 56 | 53 | 58 | 52 | 54 | 55 | 57 | 52 | 53 | 53 | 58 | 51 | 54 | 51 | 55 | 53 | 49 | 51 | 54 | 51 | 49 | 50 | 54 | 48 | 56 |
| September | Max .. | 87 | 93 | 88 | 89 | 87 | 78 | 86 | 87 | 83 | 85 | 94 | 87 | 84 | 89 | 81 | 86 | 92 | 88 | 84 | 88 | 91 | 88 | 95 | 90 | 92 | 88 |
| | Mean .. | 60 | 64 | 63 | 67 | 61 | 62 | 67 | 66 | 61 | 63 | 70 | 65 | 61 | 69 | 64 | 66 | 62 | 60 | 63 | 60 | 69 | 64 | 64 | 66 | 69 | 61 |
| | Min ... | 40 | 37 | 41 | 44 | 40 | 37 | 44 | 43 | 39 | 40 | 49 | 42 | 42 | 42 | 42 | 47 | 42 | 38 | 36 | 33 | 39 | 48 | 46 | 39 | 44 | 36 |
| October ... | Max .. | 75 | 81 | 75 | 78 | 73 | 73 | 80 | 79 | 84 | 78 | 77 | 77 | 78 | 83 | 69 | 79 | 82 | 76 | 79 | 73 | 86 | 80 | 81 | 76 | 71 | 75 |
| | Mean .. | 48 | 50 | 50 | 54 | 48 | 49 | 56 | 53 | 61 | 51 | 56 | 58 | 52 | 56 | 52 | 57 | 47 | 49 | 49 | 51 | 53 | 54 | 53 | 52 | 46 | 50 |
| | Min ... | 26 | 28 | 23 | 30 | 28 | 30 | 28 | 35 | 27 | 28 | 28 | 41 | 40 | 38 | 28 | 34 | 32 | 14 | 32 | 35 | 32 | 32 | 26 | 32 | 24 | 29 |
| November. | Max .. | 61 | 59 | 59 | 72 | 57 | 64 | 58 | 57 | 69 | 65 | 64 | 72 | 62 | 64 | 66 | 69 | 75 | 57 | 67 | 67 | 60 | 67 | 60 | 67 | 70 | 38 |
| | Mean .. | 33 | 32 | 34 | 40 | 37 | 40 | 40 | 40 | 44 | 42 | 32 | 40 | 43 | 42 | 41 | 43 | 38 | 36 | 42 | 39 | 42 | 34 | 35 | 36 | 34 | 38 |
| | Min ... | 9 | -2 | 8 | Zero | Zero | 14 | 14 | 31 | 16 | 1 | 14 | 21 | 10 | 5 | 28 | 16 | -1 | 20 | 12 | 27 | 3 | 12 | 4 | 10 | 8 | 6 |
| December. | Max .. | 45 | 46 | 60 | 52 | 68 | 45 | 67 | 46 | 62 | 50 | 59 | 45 | 57 | 61 | 50 | 60 | 53 | 53 | 64 | 53 | 57 | 57 | 58 | 55 | 56 | 57 |
| | Mean .. | 21 | 18 | 32 | 33 | 36 | 19 | 43 | 24 | 38 | 27 | 31 | 24 | 38 | 27 | 31 | 30 | 32 | 25 | 27 | 32 | 41 | 31 | 35 | 23 | 30 | 33 |
| | Min ... | -8 | -23 | 13 | 1 | -1 | -14 | -22 | -9 | -2 | -15 | 13 | -7 | Zero | -11 | -2 | -10 | -5 | 15 | 15 | 8 | 9 | -10 | -6 | -3 | Zero | 8 |
| Average temp. of each year. | | 48 | 46 | 47 | 50 | 45 | 49 | 51 | 52 | 50 | 51 | 49 | 50 | 47 | 48 | 47 | 49 | 47 | 47 | 49 | 45 | 49 | 47 | 46 | 49 | 47 | 50 |
| Mean annual temperature, 26 years, 48.25° F. Maximum, 100° F.—July, 1887. Minimum, -23° F.—December, 1872. Extreme range, 123° F. | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Mean annual temperature, 26 years, 48.25° F. Maximum, 100° F.—July, 1887. Minimum, -23° F.—December, 1872. Extreme range, 123° F.

TABULATION OF MONTHLY PRECIPITATION, CHICAGO: 1871-1896.

| MONTH. | 1871 | 1872 | 1873 | 1874 | 1875 | 1876 | 1877 | 1878 | 1879 | 1880 | 1881 | 1882 | 1883 | 1884 |
|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| January..... | 4.13 | 0.68 | 2.56 | 3.47 | 0.96 | 3.22 | 1.91 | 1.31 | 0.54 | 3.53 | 0.87 | 1.55 | 1.74 | 1.39 |
| February..... | 1.45 | 0.84 | 0.47 | 1.51 | 1.99 | 3.90 | 0.06 | 2.12 | 1.47 | 2.91 | 5.98 | 2.24 | 4.74 | 3.27 |
| March..... | 2.66 | 3.79 | 0.89 | 2.15 | 1.43 | 4.04 | 5.37 | 4.39 | 2.37 | 2.25 | 2.99 | 3.43 | 0.42 | 5.16 |
| April..... | 3.70 | 3.03 | 6.22 | 2.67 | 2.32 | 2.07 | 2.42 | 5.57 | 1.93 | 5.20 | 1.84 | 6.72 | 3.72 | 3.05 |
| May..... | 3.90 | 3.24 | 7.20 | 2.09 | 3.64 | 1.85 | 1.81 | 5.22 | 3.89 | 4.97 | 1.85 | 5.52 | 7.32 | 1.53 |
| June..... | 5.56 | 3.45 | 1.44 | 3.25 | 5.17 | 5.96 | 6.04 | 3.02 | 3.18 | 3.50 | 5.93 | 5.71 | 5.61 | 2.11 |
| July..... | 2.52 | 3.09 | 4.04 | 0.58 | 7.18 | 3.11 | 2.98 | 6.09 | 5.58 | 3.07 | 4.31 | 3.43 | 5.53 | 3.71 |
| August..... | 2.01 | 2.59 | 1.58 | 3.15 | 3.29 | 3.66 | 3.06 | 3.66 | 0.45 | 4.47 | 0.54 | 4.96 | 1.21 | 2.50 |
| September.... | 0.74 | 6.43 | 3.53 | 3.76 | 4.39 | 3.74 | 2.02 | 1.99 | 1.18 | 2.25 | 4.34 | 0.91 | 1.36 | 2.29 |
| October..... | 1.88 | 0.65 | 2.43 | 2.55 | 4.32 | 1.20 | 6.51 | 5.17 | 2.72 | 3.19 | 6.89 | 3.40 | 7.36 | 3.59 |
| November..... | 3.62 | 1.06 | 1.61 | 2.83 | 0.75 | 3.25 | 6.08 | 0.83 | 4.93 | 0.87 | 5.97 | 1.48 | 5.26 | 1.80 |
| December..... | 3.44 | 0.22 | 4.44 | 0.63 | 2.62 | 0.48 | 2.75 | 2.58 | 2.47 | 1.11 | 2.67 | 1.99 | 1.59 | 4.21 |
| Totals..... | 35.61 | 29.07 | 36.41 | 28.63 | 38.06 | 36.48 | 41.01 | 41.95 | 30.71 | 37.32 | 44.18 | 41.34 | 45.86 | 34.61 |

TABULATION OF MONTHLY PRECIPITATION, CHICAGO: 1871-1896—Continued.

| MONTH. | 1885 | 1886 | 1887 | 1888 | 1889 | 1890 | 1891 | 1892 | 1893 | 1894 | 1895 | 1896 | Means. |
|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| January..... | 3.18 | 3.56 | 3.13 | 1.56 | 1.64 | 2.98 | 1.99 | 1.99 | 2.08 | 1.55 | 2.15 | 1.12 | 2.11 |
| February..... | 2.01 | 1.51 | 5.10 | 1.51 | 1.31 | 2.42 | 1.95 | 1.57 | 2.44 | 2.13 | 1.60 | 3.48 | 2.31 |
| March..... | 0.57 | 1.79 | 0.89 | 2.99 | 1.43 | 2.10 | 2.13 | 2.21 | 1.69 | 2.66 | 1.32 | 1.26 | 2.40 |
| April..... | 4.00 | 1.29 | 0.46 | 2.13 | 2.35 | 3.28 | 3.14 | 2.17 | 4.16 | 2.65 | 0.86 | 2.79 | 3.22 |
| May..... | 3.17 | 1.00 | 1.38 | 6.22 | 5.38 | 5.13 | 2.09 | 6.77 | 1.93 | 3.35 | 1.99 | 4.16 | 3.72 |
| June..... | 5.20 | 0.94 | 1.63 | 1.66 | 2.93 | 3.25 | 2.42 | 10.58 | 3.59 | 1.96 | 1.79 | 2.82 | 3.80 |
| July..... | 2.44 | 1.53 | 1.05 | 3.93 | 9.56 | 2.57 | 2.47 | 2.23 | 3.08 | 0.60 | 2.42 | 3.61 | 3.49 |
| August..... | 11.28 | 3.38 | 3.35 | 2.10 | 0.39 | 2.58 | 4.52 | 1.85 | 0.18 | 0.60 | 6.49 | 3.52 | 2.98 |
| September..... | 2.97 | 6.93 | 4.03 | 0.98 | 2.75 | 1.39 | 0.32 | 1.34 | 1.98 | 8.28 | 0.89 | 6.70 | 2.98 |
| October..... | 3.87 | 1.42 | 2.03 | 2.95 | 1.82 | 4.20 | 0.36 | 1.54 | 1.75 | 0.84 | 0.51 | 1.36 | 2.93 |
| November..... | 2.33 | 1.66 | 2.41 | 2.89 | 3.49 | 1.59 | 2.83 | 2.68 | 2.45 | 1.18 | 5.60 | 2.16 | 2.82 |
| December..... | 3.35 | 1.76 | 3.67 | 1.94 | 1.90 | 1.25 | 1.32 | 1.63 | 2.14 | 1.66 | 6.76 | 0.16 | 2.34 |
| Totals..... | 44.37 | 26.77 | 29.13 | 30.86 | 34.95 | 32.74 | 26.54 | 36.56 | 27.47 | 27.16 | 32.38 | 33.14 | ..... |

Section V.

TWENTY-FIFTH ANNUAL REPORT

OF THE

BOARD OF INSPECTORS

OF THE

House of Correction

OF THE

CITY OF CHICAGO

AND

REPORTS OF THE SUPERINTENDENT AND CITY
PHYSICIAN TO THE BOARD.

FOR THE YEAR 1896.

CHICAGO :
WM. C. HOLLISTER & BRO., PRINTERS,
1897.

OFFICERS—1896.

INSPECTORS

HON. GEORGE B. SWIFT, Mayor.

*ERNST FECKER, Jr.

ADAMS A. GOODRICH.

WILLIAM GARDNER.

DR. A. LAGORIO.

SUPERINTENDENT

MARK. L. CRAWFORD.

CITY PHYSICIAN

A. C. COTTON, M. D.

*Term Expired.

TWENTY-FIFTH ANNUAL REPORT

OF THE

Inspectors of the House of Correction

OFFICE OF THE HOUSE OF CORRECTION,
CHICAGO, ILL., February 19, 1897.

*To His Excellency, John R. Tanner, Governor of Illinois, and to
the Honorable City Council of the City of Chicago:*

GENTLEMEN—The undersigned Board of Inspectors of the House of Correction, of the City of Chicago, have the honor to present to you this, their annual report, for the year ending December 31, 1896. We append hereto, and make a part of our report, the reports of the Superintendent and City Physician, the latter official being the attending physician of this institution.

We beg leave to report the appointment on June 2, 1896, of Dr. A. Lagorio, as Inspector, in place of Ernst Fecker, Jr., whose term of office expired.

There were confined in the House of Correction at the beginning of the year 1896, 787 males and 60 females, a total of 847—an increase over the previous year of 15. There were received during the year, 8,541 males and 1,114 females, a total of 9,655—an increase over the previous year of 1,377. Thus our total population for the year was 10,502, against 9,110 for the year 1895—an increase of 1,392.

There were discharged during the year 9,446, leaving in prison January 1, 1897, 986 males and 70 females, a total of 1,056. An increase as compared with the year 1896, of 199 males and 10 females, a total of 209. Of those discharged, 1,431 paid a part or all of their fines, aggregating \$10,209.35 ;

404 were pardoned by the Mayor ; 3 were pardoned by the Governor of the state ; 14 by order of the Criminal Court ; 74 by supersedeas ; 35 by habeas corpus ; 170 by appeal ; 8 by order of town authorities ; 16 died ; 4 escaped, and 7,287 on expiration of sentence.

The number of idle will compare favorably with the previous year, when we consider the proportionate increase in the number of prisoners received. The number of days being 52,766, as against 41,255 for the year 1895.

The John Worthy Manual Training School has been opened for educational purposes, but the Board of Inspectors cannot see how it can be productive of the desired good so long as a separate cell house is not provided for the boys.

The Board of Inspectors regrets that heretofore recommendations or protests coming from it have been entirely ignored.

We have, as required by law, submitted to the Honorable City Council, a detailed statement of the business of the institution at the end of each quarter. We submit the following statement of receipts and expenditures:

RECEIPTS FOR 1896.

| | |
|--------------------------------------|--------------|
| Brick sold..... | \$ 12,103.00 |
| Manufacture of brooms..... | 8,559.85 |
| Caning chairs..... | 1,323.05 |
| Knitting socks..... | 1,707.04 |
| Police department, laundry work..... | 5,787.28 |
| Dog pound, laundry work..... | 1.52 |
| Boarding prisoners..... | 16,939.50 |
| Grease sold..... | 703.51 |
| Old railroad iron sold..... | 256.44 |
| Sundries sold..... | 129.39 |
| Fines..... | 10,209.35 |
| | <hr/> |
| | \$ 57,719.93 |
| Appropriation..... | 45,000.00 |
| | <hr/> |
| | \$102,719.93 |

EXPENDITURES FOR 1896.

| | |
|----------------|-------------|
| Groceries..... | \$ 6,808.53 |
| Meats..... | 19,337.35 |

| | | |
|--------------------------------|--------------|---------------------|
| Flour and meal | \$ 7,104.82 | |
| Vegetables..... | 1,611.50 | |
| Bedding and clothing..... | 10,781.97 | |
| Furniture..... | 1,005.69 | |
| Engineer's department..... | 13,054.16 | |
| Omnibus, barn and forage..... | 5,662.66 | |
| Incidental expenses | 5,969.38 | |
| Salaries..... | 27,418.32 | |
| Manufacturing department | 11,781.43 | |
| Improvement and repairs..... | 2,162.62 | |
| Construction | 298.02 | |
| Tools and implements..... | 155.91 | |
| Farm account..... | 782.65 | |
| Electric light | 2,126.74 | |
| Dispensary..... | 2,026.78 | |
| | | \$118,088.53 |
| Overdrawn..... | \$ 15,421.08 | |
| Comptroller's credit..... | 52.48 | |
| | | \$ 15,368.60 |
| | | <u>\$102,719.93</u> |

We are pleased to report that the high standard of efficiency heretofore attained under the able management of the Superintendent, Mr. Mark L. Crawford, is still maintained, and the Board of Inspectors is under obligations to him for courtesies extended. The condition of the institution as to cleanliness, and its discipline, leaves nothing to be desired, the prisoners are treated with firmness, yet with the consideration due to all unfortunates.

Respectfully submitted,

GEORGE B. SWIFT, Mayor.

WILLIAM GARDNER,

ADAMS A. GOODRICH,

A. LAGORIO,

Inspectors.

SUPERINTENDENT'S REPORT.

OFFICE OF THE HOUSE OF CORRECTION,
CHICAGO, January 5, 1897.

To the Honorable Board of Inspectors of the House of Correction :

GENTLEMEN—The undersigned has the honor to submit to your honorable board, this, his seventh annual report as Superintendent of the House of Correction, it being for the fiscal year ending December 31, 1896 :

STATEMENT OF PRISONERS RECEIVED AND DISCHARGED.

| | <i>Males.</i> | <i>Females.</i> | <i>Total.</i> |
|---|---------------|-----------------|---------------|
| In prison January 1, 1896 | 787 | 60 | 847 |
| Received from January 1, 1896, to December 31, 1896, inclusive..... | 8,541 | 1,114 | 9,655 |
| | 9,328 | 1,174 | 10,502 |
| Discharged January 1, 1896, to December 31, 1896, inclusive | 8,342 | 1,104 | 9,446 |
| In prison December 31, 1896..... | 986 | 70 | 1,056 |
| | 9,328 | 1,174 | 10,502 |

OFFENSES FOR WHICH CONVICTED.

| | |
|--|-------|
| Vagrancy (Sec. 1598) | 874 |
| Breach of the peace (Sec. 1624)..... | 7,359 |
| Keepers or inmates of houses of ill fame (Sec. 1602) | 137 |
| Other miscellaneous ordinances..... | 553 |
| Malicious mischief..... | 2 |
| Assault to kill..... | 38 |
| Assault to commit rape..... | 1 |
| Assault and battery..... | 1 |
| Larceny, etc..... | 216 |
| Burglary, etc..... | 91 |
| Robbery, etc..... | 21 |
| Obtaining money by false pretenses..... | 5 |
| Obtaining goods by false pretenses..... | 1 |
| Resisting an officer (Sec. 1791)..... | 54 |
| Carrying concealed weapons (Sec. 1215)..... | 152 |
| Keepers or inmates of opium joints (Sec. 1) | 56 |

OFFENSES FOR WHICH CONVICTED—Continued.

| | |
|--|-------|
| Rape..... | 1 |
| Mayhem..... | 1 |
| Abandonment of wife..... | 6 |
| Indecent exposure of person (Sec. 1603)..... | 47 |
| Violation of town or village ordinances..... | 32 |
| Forgery..... | 3 |
| Attempted rape..... | 1 |
| Contempt of court..... | 1 |
| Attempted burglary..... | 1 |
| Attempted larceny..... | 1 |
| Total..... | 9,655 |

FINES AND TERMS OF SENTENCES.

| <i>Executions.</i> | <i>Prisoners.</i> | <i>Executions.</i> | <i>Prisoners.</i> |
|--------------------|-------------------|--------------------|-------------------|
| \$ 1.50 each..... | 5 | \$17.50 each..... | 8 |
| 2.50 "..... | 116 | 18.00..... | 1 |
| 2.65 "..... | 3 | 19.00..... | 1 |
| 3.50 "..... | 263 | 21.00..... | 1 |
| 3.65 "..... | 6 | 21.50 each..... | 414 |
| 4.50 "..... | 343 | 21.60..... | 1 |
| 4.80..... | 1 | 21.65 each..... | 6 |
| 5.00 each..... | 3 | 21.75..... | 1 |
| 5.50 "..... | 15 | 22.00..... | 1 |
| 6.50 "..... | 2,175 | 22.30..... | 1 |
| 6.65 "..... | 7 | 22.50 each..... | 3 |
| 7.00 "..... | 2 | 25.00..... | 1 |
| 7.50 "..... | 49 | 26.50 each..... | 1,284 |
| 8.50..... | 1 | 26.65 "..... | 11 |
| 9.00..... | 1 | 26.85 "..... | 2 |
| 11.50 each..... | 2,348 | 27.00..... | 1 |
| 11.65 "..... | 10 | 27.30..... | 1 |
| 11.80 "..... | 2 | 27.50 each..... | 8 |
| 12.00 "..... | 3 | 28.50..... | 1 |
| 12.50 "..... | 27 | 30.00 each..... | 2 |
| 13.00..... | 1 | 31.50 "..... | 50 |
| 13.50..... | 1 | 31.65..... | 1 |
| 14.00..... | 1 | 31.85..... | 1 |
| 15.00 each..... | 6 | 32.00..... | 1 |
| 16.35..... | 1 | 32.50..... | 1 |
| 16.50 each..... | 849 | 33.00..... | 1 |
| 16.65 "..... | 8 | 36.50 each..... | 16 |
| 17.00 "..... | 3 | 41.50 "..... | 8 |
| 17.30..... | 1 | 44.50..... | 1 |

FINES AND TERMS OF SENTENCES—Continued.

| <i>Executions.</i> | <i>Prisoners.</i> | <i>Executions.</i> | <i>Prisoners.</i> |
|--------------------|-------------------|--------------------|-------------------|
| \$46.50 each | 3 | \$76.65 each | 2 |
| 49.60 | 1 | 82.00 | 1 |
| 51.50 each | 667 | 86.50 each | 93 |
| 51.65 | 1 | 87.50 | 1 |
| 52.50 | 1 | 101.50 each | 282 |
| 54.50 | 1 | 101.65 " | 10 |
| 56.25 | 1 | 106.00 | 1 |
| 61.50 each | 3 | 106.50 each | 4 |
| 71.50 | 1 | 107.50 | 1 |
| 76.50 each | 111 | | |

CRIMINAL COURT.

| | | | |
|----------------------------|----|----------------------------|-------|
| \$120.10 | 1 | 2 months and \$28.55 | 1 |
| 121.90 | 1 | 3 " " 19.05 | 1 |
| 124.35 | 1 | 3 " " 21.40 | 1 |
| 127.20 | 1 | 3 " " 22.45 | 1 |
| 129.65 | 1 | 3 " " 27.10 | 1 |
| 15 days | 1 | 3 " " 15 days each | 2 |
| 30 " each | 32 | 4 " " \$46.85 | 1 |
| 40 " | 1 | 5 " " 20.45 | 1 |
| 45 " | 1 | 5 " " 23.90 | 1 |
| 60 " each | 27 | 5 " " 26.15 | 1 |
| 70 " | 1 | 6 " " 17.80 | 1 |
| 90 " each | 9 | 6 " " 21.55 | 1 |
| 1 month each | 3 | 6 " " 22.45 | 1 |
| 2 " " | 13 | 6 " " 26.50 | 1 |
| 3 " " | 54 | 6 " " 26.95 | 1 |
| 4 " " | 22 | 6 " " 28.45 | 1 |
| 5 " " | 3 | 6 " " 42.87 | 1 |
| 6 " " | 77 | 6 " " 49.60 | 1 |
| 7 " " | 8 | 11 " " 52.45 | 1 |
| 8 " " | 7 | 1 year and \$19.10 | 1 |
| 9 " " | 8 | 1 " " 20.45 | 1 |
| 10 " " | 5 | 1 " " 21.50 | 1 |
| 11 " | 1 | 1 " " 39.00 | 1 |
| 12 " each | 79 | 1 " " 71.50 | 1 |
| 30 days and \$122.50 | 1 | 1 " " 116.70 each | 2 |
| 60 " " 18.30 | 1 | 1 " " 121.15 | 1 |
| 60 " " 24.80 | 1 | | |
| 60 " " 25.10 | 1 | | |
| 2 months and \$23.90 | 1 | | |
| | | Total | 9,655 |

Report of Superintendent.

9

FROM WHAT SOURCE RECEIVED.

| | |
|---------------------------------------|-------|
| Criminal Court of Cook County..... | 389 |
| Police Justices' Courts, Chicago..... | 8,916 |
| Justices of the Peace..... | 316 |
| City of Evanston, Ill..... | 14 |
| Village of Lamont, Ill..... | 2 |
| " " Summit, Ill..... | 7 |
| " " Spring Forest, Ill..... | 1 |
| Town of Cicero, Ill..... | 8 |
| Recaptured..... | 2 |
| Total..... | 9,655 |

AGES OF PRISONERS.

| | |
|------------------------------------|-------|
| 9 years old..... | 3 |
| 10 " "..... | 2 |
| 11 " "..... | 4 |
| 12 " "..... | 32 |
| 13 " "..... | 64 |
| 14 " "..... | 132 |
| 15 " "..... | 133 |
| 16 " "..... | 277 |
| 17 " "..... | 289 |
| 18 " "..... | 391 |
| 19 " "..... | 522 |
| 20 " "..... | 395 |
| 21 " "..... | 471 |
| 22 to 25 years old, inclusive..... | 1,582 |
| 26 " 30 " " "..... | 1,585 |
| 31 " 35 " " "..... | 1,166 |
| 36 " 40 " " "..... | 1,013 |
| 41 " 50 " " "..... | 997 |
| 51 " 60 " " "..... | 401 |
| 61 " 70 " " "..... | 173 |
| 71 " 80 " " "..... | 23 |
| Total..... | 9,655 |

HOW MANY TIMES IMPRISONED.

| | |
|--|-------|
| Admit to have been previously in prison..... | 4,528 |
| Claim to be on first commitment..... | 5,127 |
| Total..... | 9,655 |

EDUCATION.

| | |
|------------------------------------|-------|
| Claim they can read and write..... | 8,959 |
| Claim they can read only..... | 69 |
| Cannot read or write..... | 627 |
| Total..... | 9,655 |

House of Correction.

HOW RELEASED.

| | |
|---------------------------------------|-------|
| Paid fine to City Comptroller..... | 236 |
| Paid fine at House of Correction..... | 1,195 |
| Pardoned by Mayor of City..... | 404 |
| Pardoned by Governor of State..... | 3 |
| Order of Criminal Court..... | 14 |
| Supersedeas..... | 74 |
| Habeas Corpus..... | 35 |
| Appeal..... | 170 |
| Town authorities..... | 8 |
| Deaths..... | 16 |
| Escaped..... | 4 |
| Expiration of Sentence..... | 7,287 |
| Total | 9,446 |

SOCIAL RELATIONS.

| | |
|--------------------------|-------|
| Claim to be married..... | 2,460 |
| Claim to be single..... | 7,195 |
| Total | 9,655 |
| Have children..... | 1,602 |

HAVING PARENTS.

| | |
|------------------------------------|-------|
| Have father and mother living..... | 3,462 |
| Have father only living..... | 1,063 |
| Have mother only living..... | 1,734 |
| Without parents..... | 3,396 |
| Total | 9,655 |

COLOR.

| | |
|-------------|-------|
| White..... | 8,604 |
| Black..... | 1,050 |
| Red..... | 1 |
| Total | 9,655 |

RECORD OF DEATHS.

1. Frank Anderson, admitted February 11, 1896, under Execution No. 1,852, by Justice Henry Bonnefoi. Fine and costs, \$86.50, for violation of Section 1,624, a diversion tending to a breach of the peace. Died February 11, 1896. Received in a dying condition. Coroner's inquest at 2 p. m., February 12, 1896. Verdict, committed suicide while despondent. Drug taken before entering prison. Age, 28 years.

2. Henry Long, admitted February 5, 1896, under Execution No. 8,022, by Justice Henry G. Schulte. Fine and costs, \$21.50, for violation of Section

RECORD OF DEATHS—Continued.

1,624, disorderly conduct. Died February 15, 1896, of pneumonia. Age, 46 years.

3. Annie McFadden, admitted February 7, 1896, under Execution No. 2,887, by Justice Miles Kehoe. Fine and costs, \$26.50, for violation of Section 1,624, a breach of the peace. Died March 7, 1896, of cerebritis. Age, 43 years.

4. James Liman, admitted January 24, 1896, under Execution No. 8,608, by Justice Q. J. Chott. Fine and costs, \$51.50, for violation of Section 1,624, a breach of the peace. Died March 27, 1896, of cerebral hemorrhage. Age, 28 years.

5. M. J. McLaughlin, admitted March 30, 1896, under execution No. 6,784, by Justice G. W. Underwood. Fine and costs, \$16.50, for violation of Section 1,598, being an idle person not having visible means of support, and living without lawful employment. Died April 3, 1896, of epilepsy, heart-failure, complicated with morphine and cocaine habit. Age, 30 years.

6. Geo. Taylor, admitted May 9, 1896, under execution No. 2,208, by Justice Henry Bonnefoi. Fine and costs, \$26.50, for violation of Section 1,624, a diversion tending to a breach of the peace. Died May 9, 1896, of heart failure. Coroner's inquest. Age, 52 years.

7. John Raierman, admitted May 6, 1896, under execution No. 998, by Justice George Kersten. Fine and costs, \$11.50, for violation of Section 1,624, a breach of the peace. Died May 12, 1896, of apoplexy, epileptic fits. Age, 44 years.

8. John Crowley, admitted May 11, 1896, under execution No. 7,097, by Justice John Richardson. Fine and costs, \$6.50, for violation of Section 1,624, a diversion tending to a breach of the peace. Died May 12, 1896, of delirium tremens. Age, 34 years.

9. John Hutchings, admitted June 6, 1896, under execution No. 4,390, by Justice Miles Kehoe. Fine and costs, \$51.50, for violation of Section 1,624, a breach of the peace. Died June 17, 1896, of pulmonary tuberculosis. Age, 34 years.

10. James McNally, admitted June 6, 1896, under execution No. 9,017, by Justice G. W. Underwood. Fine and costs, \$16.50, for violation of Section 1,624, a diversion tending to a breach of the peace. Died June 29, 1896, of heart failure. (Had the cocaine habit for years.) Age, 45 years.

11. Joseph Kelly, admitted April 8, 1896, under execution No. 9,316, by Justice Q. J. Chott. Fine and costs, \$101.50, for violation of Section 1,624, a breach of the peace. Died of typhoid fever on July 1, 1896. Age 25 years.

12. Fred Hoffman, admitted June 27, 1896, under execution No. 4,859 by Justice Miles Kehoe. Fine and costs, \$16.50, for violation of Section 1,624, a breach of the peace. Died July 1, 1896, of delirium tremens, complicated by epilepsy. Age, 42 years.

House of Correction.

RECORD OF DEATHS—Continued.

13. Elizabeth Newton, admitted July 14, 1896, under execution No. 645, by Justice Q. J. Chott. Fine and costs, \$26.50, for violation of Section 1,624, a breach of the peace. Died August 1, 1896, of heart failure. Coroner's inquest. Age, 50 years.

14. J. Murphy, admitted October 30, 1896, under execution No. 4 473, by Justice G. W. Underwood. Fine and costs, \$16.50, for violation of Section 1,624, a diversion tending to a breach of the peace. Died November 1, 1896, of pericarditis, complicated with pneumonia. Age, 56 years.

15. Nellie Stevens, admitted September 3, 1896, under execution No. 2,524, by Justice W. T. Hall. Fine and costs, \$51.50, for violation of Section 1,624, a breach of the peace. Died December 3, 1896. Coroner's inquest. Verdict, diseased heart, aortic regurgitation. Age, 34 years.

16. Nicholas Lynch, admitted December 8, 1896, under execution No. 8,654, by Justice John Richardson. Fine and costs, \$51.50, for violation of Section 1,624, a diversion tending to a breach of the peace. Died December 28, 1896, of cerebral hemorrhage. Age, 49 years.

Nativities of Male Prisoners Under 21 Years of Age Received During 1896, and
Nativities of Their Parents.

| MALE PRISONERS. | 9 Years old. | 10 Years old. | 11 Years old. | 12 Years old. | 13 Years old. | 14 Years old. | 15 Years old. | 16 Years old. | 17 Years old. | 18 Years old. | 19 Years old. | 20 Years old. | Total. |
|-------------------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--------|
| United States | 3 | 2 | 3 | 19 | 50 | 97 | 95 | 214 | 224 | 203 | 376 | 258 | 1,544 |
| Ireland | | | | 1 | 1 | 3 | 3 | 1 | 3 | 4 | 7 | 26 | 55 |
| England | | | | 2 | | 1 | 1 | 1 | 7 | 5 | 5 | 4 | 30 |
| Scotland | | | | | | 1 | 1 | 1 | 1 | | 2 | | 3 |
| Wales | | | | | | | | | | | | | |
| Germany | | | | 3 | 4 | 8 | 12 | 43 | 42 | 58 | 72 | 59 | 301 |
| Canada | | | | 1 | 2 | 2 | 2 | 2 | 3 | 5 | 8 | 7 | 32 |
| France | | | | | | 1 | | 1 | | | | | 4 |
| Italy | | | | 5 | 4 | 8 | 8 | 9 | 2 | 4 | 1 | 2 | 43 |
| Holland | | | | | | | | | 2 | 1 | 1 | | 4 |
| Switzerland | | | | | | | | | | | | | 1 |
| Austria | | | | | 1 | | | | | 3 | | 1 | 5 |
| Bohemia | | | | | 1 | 1 | 1 | | 7 | 3 | 3 | 2 | 19 |
| Norway | | | | | | 1 | | | 1 | 3 | 4 | 2 | 11 |
| Sweden | | | | | | 1 | 3 | | | 3 | 3 | 3 | 13 |
| Denmark | | | | | | | | | 1 | | | | 1 |
| Greece | | | | | | 2 | 1 | 1 | 1 | 1 | 4 | 3 | 12 |
| Russia | | | 1 | | | 3 | 3 | 5 | 1 | 1 | 4 | 2 | 22 |
| Poland | | | | | 3 | 4 | 3 | 8 | 5 | 5 | 5 | 6 | 38 |
| Hungary | | | | | | 1 | | 1 | | | | | 2 |
| Mexico | | | | | | 1 | | | | | | | 1 |
| Belgium | | | | | | | | | | | 2 | | 2 |
| Totals | 3 | 2 | 4 | 31 | 66 | 132 | 131 | 293 | 383 | 303 | 516 | 360 | 2,144 |

| PARENTS OF MALE PRISONERS. | 9 Years old. | 10 Years old. | 11 Years old. | 12 Years old. | 13 Years old. | 14 Years old. | 15 Years old. | 16 Years old. | 17 Years old. | 18 Years old. | 19 Years old. | 20 Years old. | Total. |
|----------------------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--------|
| United States | 2 | | | | | | | | | | | | 1,032 |
| Ireland | 1 | | | | | | | | | | | | 255 |
| England | | | | | | | | | | | | | 66 |
| Scotland | | | | | | | | | | | | | 14 |
| Wales | | | | | | | | | | | | | 5 |
| Germany | | 2 | | | | | | | | | | | 37 |
| Canada | | | | | | | | | | | | | 59 |
| France | | | | | | | | | | | | | 11 |
| Italy | | | | | | | | | | | | | 53 |
| Holland | | | | | | | | | | | | | 4 |
| Switzerland | | | | | | | | | | | | | 3 |
| Austria | | | | | | | | | | | | | 10 |
| Bohemia | | | | | | | | | | | | | 51 |
| Norway | | | | | | | | | | | | | 38 |
| Sweden | | | | | | | | | | | | | 32 |
| Denmark | | | | | | | | | | | | | 7 |
| Greece | | | | | | | | | | | | | 12 |
| Russia | | | | | | | | | | | | | 27 |
| Poland | | | | | | | | | | | | | 76 |
| Hungary | | | | | | | | | | | | | 4 |
| Mexico | | | | | | | | | | | | | 3 |
| Belgium | | | | | | | | | | | | | 2 |
| Totals | 3 | 2 | 4 | 31 | 66 | 132 | 131 | 293 | 303 | 303 | 516 | 360 | 2,144 |

House of Correction.

Nativities of Female Prisoners Under 21 Years of Age Received During 1896, and
the Nativities of Their Parents.

| FEMALE PRISONERS. | 10 Years old. | 11 Years old. | 12 Years old. | 13 Years old. | 14 Years old. | 15 Years old. | 16 Years old. | 17 Years old. | 18 Years old. | 19 Years old. | 20 Years old. | Totals. |
|------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|---------|
| United States..... | ... | ... | ... | ... | ... | 1 | 1 | 4 | 13 | 26 | 42 | 87 |
| Ireland..... | ... | ... | ... | 1 | 2 | ... | ... | ... | 1 | 3 | 1 | 5 |
| Germany..... | ... | ... | ... | ... | 2 | ... | ... | ... | ... | 2 | ... | 2 |
| Canada..... | ... | ... | ... | ... | 1 | 3 | ... | ... | ... | 1 | 3 | 4 |
| Australia..... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 1 |
| England..... | ... | ... | ... | ... | ... | ... | ... | 2 | ... | 2 | ... | 2 |
| Totals..... | ... | ... | ... | ... | ... | 1 | 1 | 4 | 14 | 34 | 47 | 101 |
| PARENTS OF FEMALE PRISONERS. | 10 Years old. | 11 Years old. | 12 Years old. | 13 Years old. | 14 Years old. | 15 Years old. | 16 Years old. | 17 Years old. | 18 Years old. | 19 Years old. | 20 Years old. | Totals. |
| United States..... | ... | ... | ... | ... | ... | 1 | 1 | 4 | 13 | 26 | 42 | 87 |
| Ireland..... | ... | ... | ... | 1 | 2 | ... | ... | ... | 1 | 3 | 1 | 5 |
| Germany..... | ... | ... | ... | ... | 2 | ... | ... | ... | ... | 2 | ... | 2 |
| Canada..... | ... | ... | ... | ... | 1 | 3 | ... | ... | ... | 1 | 3 | 4 |
| France..... | ... | ... | ... | ... | 1 | ... | ... | ... | ... | ... | 1 | 1 |
| England..... | ... | ... | ... | ... | ... | ... | ... | 2 | ... | 2 | ... | 2 |
| Totals..... | ... | ... | ... | ... | ... | 1 | 1 | 4 | 14 | 34 | 47 | 101 |

NATIVITY.

| NATIVITY OF PRISONERS. | |
|------------------------|-------|
| United States..... | 6,349 |
| Ireland..... | 1,014 |
| England..... | 264 |
| Scotland..... | 93 |
| Wales..... | 18 |
| Germany..... | 752 |
| Canada..... | 236 |
| France..... | 39 |
| Spain..... | 2 |
| Italy..... | 74 |
| Holland..... | 14 |
| Belgium..... | 11 |
| Switzerland..... | 14 |
| Austria..... | 57 |
| Australia..... | 5 |
| Bohemia..... | 66 |
| China..... | 10 |
| Norway..... | 155 |
| Sweden..... | 190 |
| Denmark..... | 41 |
| Greece..... | 27 |
| Russia..... | 58 |
| Poland..... | 151 |
| Hungary..... | 7 |
| Finland..... | 1 |
| Mexico..... | 4 |
| Brazil..... | 1 |
| Africa..... | 1 |
| Armenia..... | 1 |
| Total..... | 9,655 |

| NATIVITY OF PARENTS. | |
|----------------------|-------|
| United States..... | 3,940 |
| Ireland..... | 2,328 |
| England..... | 390 |
| Scotland..... | 169 |
| Wales..... | 29 |
| Germany..... | 1,273 |
| Canada..... | 312 |
| France..... | 70 |
| Spain..... | 6 |
| Italy..... | 87 |
| Holland..... | 18 |
| Belgium..... | 12 |
| Switzerland..... | 19 |
| Austria..... | 65 |
| Australia..... | 8 |
| Bohemia..... | 125 |
| China..... | 10 |
| Norway..... | 201 |
| Sweden..... | 223 |
| Denmark..... | 55 |
| Greece..... | 27 |
| Russia..... | 66 |
| Poland..... | 204 |
| West Indies..... | 2 |
| Hungary..... | 8 |
| Finland..... | 1 |
| Mexico..... | 4 |
| Brazil..... | 1 |
| Africa..... | 1 |
| Armenia..... | 1 |
| Total..... | 9,655 |

OCCUPATION OF MALES.

| | |
|--------------------|-----|
| Actors..... | 12 |
| Agents..... | 35 |
| Artists..... | 5 |
| Architects..... | 2 |
| Acrobats..... | 1 |
| Bakers..... | 83 |
| Barbers..... | 137 |
| Bartenders..... | 31 |
| Basket Makers..... | 2 |

| | |
|----------------------|----|
| Bill Posters..... | 4 |
| Blacksmiths..... | 41 |
| Boiler Makers..... | 36 |
| Box Makers..... | 20 |
| Book Binders..... | 11 |
| Book Keepers..... | 1 |
| Bootblacks..... | 6 |
| Brass Finishers..... | 8 |
| Brewers..... | 2 |

OCCUPATION OF MALES—Continued.

| | | | |
|------------------------|-----|----------------------------|-------|
| Brick Layers..... | 63 | Hatters | 2 |
| Broom Makers..... | 3 | Harness Makers..... | 15 |
| Brush Makers..... | 2 | Horse Shoers..... | 23 |
| Butchers..... | 103 | Hostlers..... | 186 |
| Calciminers..... | 5 | Iron Workers..... | 53 |
| Carpenters | 163 | Jewelers..... | 10 |
| Carriage Builders..... | 3 | Knitters..... | 5 |
| Carpet Layers..... | 9 | Laborers | 2,923 |
| Caulkers | 1 | Lathers and Nailers..... | 40 |
| Chair Makers..... | 5 | Laundrymen..... | 3 |
| Cigar Makers..... | 51 | Lawyers..... | 6 |
| Clerks..... | 208 | Linemen | 13 |
| Confectioners..... | 13 | Lithographers..... | 7 |
| Coopers | 16 | Locksmiths | 2 |
| Cooks..... | 191 | Machinists | 102 |
| Core Makers..... | 23 | Marble Cutters..... | 4 |
| Cornice Makers..... | 1 | Masons | 11 |
| Curriers..... | 1 | Mattress Makers..... | 1 |
| Cutters..... | 5 | Messengers..... | 40 |
| Divers | 3 | Metal Workers | 4 |
| Doctors | 4 | Millers..... | 2 |
| Draftsmen..... | 3 | Miners..... | 16 |
| Drivers..... | 44 | Ministers..... | 1 |
| Druggists | 4 | Molders | 97 |
| Dyers | 1 | Musicians | 18 |
| Editors..... | 2 | New boys | 13 |
| Electricians | 25 | Operators | 14 |
| Electrotypers..... | 7 | Opticians..... | 1 |
| Engravers..... | 4 | Pavers | 5 |
| Engineers..... | 38 | Painters and Glaziers..... | 249 |
| Farmers..... | 2 | Paper Makers..... | 2 |
| File Cutters..... | 2 | Paper Hangers..... | 1 |
| Finishers..... | 20 | Peddlers | 84 |
| Firemen | 159 | Photographers..... | 4 |
| Florists | 8 | Pipe Fitters..... | 1 |
| Fishermen..... | 3 | Picture Framers | 5 |
| Gardeners..... | 13 | Plasterers | 26 |
| Gas Fitters..... | 10 | Platers | 9 |
| Gilders..... | 4 | Plumbers..... | 78 |
| Glass Bevelers..... | 1 | Polishers | 48 |
| Glass Blowers..... | 4 | Porters..... | 491 |
| Glove Cutters..... | 1 | Potters | 2 |
| Grinders | 1 | Printers | 158 |
| Grocers | 7 | Pressers..... | 1 |

OCCUPATION OF MALES—Continued.

| | | | |
|-----------------------|-----|---------------------|-------|
| Puddlers | 1 | Tailors | 122 |
| R. R. Employes | 157 | Tanners | 6 |
| Reporters | 1 | Teamsters | 420 |
| Roofers | 20 | Tile Setters | 2 |
| Sailors | 138 | Tin Smiths | 68 |
| Sail Makers | 2 | Tuck Pointers | 1 |
| Salesmen | 43 | Undertakers | 3 |
| Saloon Keepers | 10 | Upholsterers | 24 |
| Sawyers | 5 | Varnishers | 2 |
| School Boys | 2 | Wagon Makers | 1 |
| School Teachers | 1 | Waiters | 236 |
| Shoe Lasters | 1 | Weavers | 5 |
| Shoe Makers | 96 | Wire Workers | 11 |
| Steam Fitters | 49 | Wood Workers | 26 |
| Stenographers | 7 | Wheelwright | 1 |
| Stone Cutters | 20 | No Occupation | 602 |
| Store Keepers | 2 | | |
| Stove Mounters | 3 | Total | 8,541 |
| Steel Workers | 1 | | |

OCCUPATION OF FEMALES.

| | | | |
|---------------------|-----|---------------------|-------|
| Book Keepers | 1 | Milliners | 1 |
| Cooks | 27 | Prostitutes | 123 |
| Cigar Makers | 1 | Seamstresses | 12 |
| Domestics | 578 | Stenographers | 1 |
| House Keepers | 4 | No Occupation | 343 |
| Laundresses | 22 | | |
| Lawyers | 1 | Total | 1,114 |

HOW EMPLOYED.—MALES.

| | Days. |
|---|--------|
| Caning chair seats | 3,778 |
| Broom making | 35,631 |
| Store room | 1,862 |
| Cellar | 990 |
| Brick yard and delivering brick | 19,063 |
| Institution washing | 7,481 |
| Sewing and repairing | 3,556 |
| Construction of buildings and permanent improvements | 55 |
| Construction and repairing roadways and filling grounds | 728 |
| Improvements and repairs of buildings | 204 |
| Officers' quarters | 7,546 |
| Kitchen and handling supplies | 7,206 |
| Electric light | 1,338 |

HOW EMPLOYED—MALES—Continued.

| | Days. |
|---|---------|
| Blacksmiths, tinsmiths, plumbers and steam fitters..... | 4,049 |
| Bath room..... | 4,872 |
| Boys in school..... | 16,847 |
| Engineers' department, steam heating..... | 8,342 |
| Carpenters and laborers in shop..... | 4,879 |
| Shoe and harness makers..... | 2,306 |
| Knitting shop..... | 19,259 |
| White washing and painting..... | 793 |
| Cultivating grounds and garden..... | 3,200 |
| Hauling coal and other supplies..... | 2,855 |
| Yards..... | 10,000 |
| Barns..... | 3,425 |
| Bakery..... | 3,478 |
| Prison hall work..... | 36,832 |
| Invalids and nurses in hospital..... | 3,956 |
| Invalids and imbeciles in cells..... | 23,875 |
| In cells, unemployed, not imbeciles..... | 51,228 |
| Sundays and holidays..... | 38,257 |
| Total..... | 327,891 |

HOW EMPLOYED.—FEMALES.

| | Days. |
|--------------------------------------|--------|
| Police washing..... | 6,222 |
| Institution washing..... | 4,137 |
| Sewing and repairing..... | 2,871 |
| Dining room and house servants..... | 2,669 |
| Prison hall work..... | 3,253 |
| Invalids and nurses in hospital..... | 630 |
| Invalids and imbeciles in cells..... | 2,963 |
| In cells, unemployed..... | 1,538 |
| Sundays and holidays..... | 3,237 |
| Total..... | 27,520 |

STATEMENT OF TEAMING.

| | Days. |
|---------------------------------------|-------|
| Omnibus hauling prisoners..... | 600 |
| Brickyard teams..... | 634½ |
| Delivering brick..... | 35 |
| Cultivating grounds..... | 9 |
| Hauling supplies, coal, ice, etc..... | 447 |
| Hauling dirt and snow from yard..... | 78 |
| Improving roads, etc..... | 259½ |
| Construction of new building..... | 4 |
| Total..... | 2,067 |

Report of Superintendent.

19

STATEMENT OF RATIONS.

| | | | |
|----------------|--------|----------------|---------|
| January | 26,803 | August | 33,241 |
| February | 26,970 | September..... | 30,301 |
| March | 28,883 | October | 30,182 |
| April | 26,436 | November..... | 28,848 |
| May | 29,665 | December | 31,587 |
| June..... | 30,283 | | |
| July..... | 32,031 | Total..... | 355,230 |

Daily Average of Prisoners, 970 57-100.

Average Imprisonment, 36 79-100 days.

STATEMENT OF CASH RECEIVED FROM JANUARY 1, 1896, TO DECEMBER 31, 1896, INCLUSIVE, AND SENT TO CITY COMPTROLLER.

| | | | |
|---|-------------------------|--------------|--------------|
| E. Sass, | brick sold,.....\$ | 14.25 | |
| Murphy-Lorimer Brick Co., | " | 263.00 | |
| J. Dinet, | " | 90.00 | |
| A. J. Triebull, | " | 2,602.50 | |
| Wm. Rohn, | " | 450.00 | |
| M. Masek, | " | 225.00 | |
| Chas. Goetz, | " | 2,980.50 | |
| Wm. Ludewing, | " | 1,372.50 | |
| Frank Masek, | " | 540.00 | |
| Walter Baker | " | 489.50 | |
| Vaclav Sedlak, | " | 40.50 | |
| Herman Mueller, | " | 1,948.50 | |
| Fire Department, | " | 11.00 | |
| Koeritz & Heier, | " | 625.00 | |
| Theo. Langfeldt & Co., | " | 58.50 | |
| Joe Sass, | " | 210.00 | |
| Jim Novak, | " | 3.75 | |
| Kehoe Bros., | " | 31.50 | |
| Jos. Kommorous, | " | 87.50 | |
| E. O'Connor, | " | 17.50 | |
| Herman Krause, | " | 42.00 | |
| | | | \$ 12,103.00 |
| Chicago Broom Mfg. Co., mfg. brooms | \$ | 8,559.85 | |
| Paramount Knitting Co., mfg. socks..... | | 1,707.04 | |
| Johnson Chair Co., caning chairs..... | | 546.53 | |
| R. L. Allen, caning chairs | | 776.52 | |
| Police Department, laundry work..... | | 5,787.28 | |
| Dog Pound, laundry work | | 1.52 | |
| | | | \$ 17,378.74 |
| Cook County, | boarding prisoners..... | \$ 16,693.20 | |
| City of Evanston, | " | 90.00 | |
| Town of Cicero, | " | 85.80 | |

House of Correction.

STATEMENT OF CASH RECEIVED—Continued.

| | | |
|--|-----------|--------------|
| Village of Summit, boarding prisoners..... | \$ 63.00 | |
| Village of Spring Forest, "..... | 7.50 | |
| | | \$ 16,939.50 |
| S. Jacobs, rags and iron..... | \$ 30.47 | |
| R. Ryder, old barrels..... | 20.42 | |
| Wm. Eschenbach, sold cow..... | 11.00 | |
| Barney McNeill, old bus..... | 17.50 | |
| Mfg. Account, City Comptroller, cabinet..... | 50.00 | |
| | | \$ 129.39 |
| John Fitzpatrick Co., grease, etc..... | \$ 703.51 | |
| L. Spehro, old railroad and scrap iron..... | 256.44 | |
| | | \$ 959.95 |
| Fines paid at House of Correction..... | 8,159.60 | |
| Fines paid, City Comptroller..... | 2,049.75 | |
| | | \$ 10,209.35 |
| Total..... | | \$ 57,719.93 |

ACCOUNTS CHARGED AS FOLLOWS HAVE BEEN AUDITED DURING THE
YEAR 1896 AND CREDITED TO CITY COMPTROL-
LER'S DEPARTMENT.

| | |
|-------------------------------|---------------|
| Groceries..... | \$ 6,808.53 |
| Meats..... | 19,337.35 |
| Flour and meal..... | 7,104.82 |
| Vegetables..... | 1,611.50 |
| Bedding and clothing..... | 10,781.97 |
| Furniture..... | 1,005.69 |
| Engineers' department..... | 13,054.16 |
| Omnibus barn and forage..... | 5,662.66 |
| Incidental expense..... | 5,969.38 |
| Salaries..... | 27,418.32 |
| Manufacturing department..... | 11,781.43 |
| Improvements and repairs..... | 2,162.62 |
| Construction..... | 298.02 |
| Tools and implements..... | 155.91 |
| Farm account..... | 782.65 |
| Electric light..... | 2,126.74 |
| Dispensary..... | 2,026.78 |
| Total..... | \$ 118,088.53 |

Provisions: SUMMARY OF ACCOUNTS.

| | | |
|--|--------------|--------------|
| Inventory valuation January 1, 1896..... | \$ 578.42 | |
| Charged to this account during year..... | 35,223.25 | |
| Received for sundries sold..... | | \$ 1,143.31 |
| Valuation on hand December 31, 1896..... | | 840.78 |
| Balance to general expense..... | | 33,817.58 |
| Total..... | \$ 35,801.67 | \$ 35,801.67 |

SUMMARY OF ACCOUNTS—Continued.

Bedding and Clothing :

| | | | |
|--|----|-----------|--------------|
| Inventory valuation January 1, 1896..... | \$ | 9,377.54 | |
| Charged this account during year..... | | 10,781.97 | |
| Received for sundries sold..... | \$ | | 9.30 |
| Inventory valuation December 31, 1896..... | | | 13,316.13 |
| Balance to general expense..... | | | 6,834.08 |
| Total | \$ | 20,159.51 | \$ 20,159.51 |

Furniture :

| | | | |
|---|----|-----------|--------------|
| Inventory valuation January 1, 1896..... | \$ | 13,929.99 | |
| Charged this account during year..... | | 1,005.69 | |
| Inventory valuation December 31, 1896.... | \$ | | 14,168.02 |
| Balance to general expense..... | | | 767.66 |
| Total | \$ | 14,935.68 | \$ 14,935.68 |

Fuel, Engineer's Department :

| | | | |
|---|----|-----------|--------------|
| Inventory valuation January 1, 1896..... | \$ | 278.68 | |
| Charged this account during year..... | | 13,054.16 | |
| Received for sundries sold..... | \$ | | 18.61 |
| Inventory valuation December 31, 1896.... | | | 795.37 |
| Balance to general expense..... | | | 12,518.86 |
| Total | \$ | 13,332.84 | \$ 13,332.84 |

Incidental Expense :

| | | | |
|--|----|----------|-------------|
| Inventory valuation January 1, 1896..... | \$ | 1,387.74 | |
| Charged this account during year..... | | 5,969.38 | |
| Inventory valuation December 31, 1896..... | \$ | | 2,377.64 |
| Balance to general expense..... | | | 4,979.48 |
| Total | \$ | 7,357.12 | \$ 7,357.12 |

Tools and Implements:

| | | | |
|--|----|----------|-------------|
| Inventory valuation January 1, 1896..... | \$ | 1,553.83 | |
| Charged to this account during year..... | | 155.91 | |
| Inventory valuation December 31, 1896..... | \$ | | 841.93 |
| Balance to general expense..... | | | 867.81 |
| Total | \$ | 1,709.74 | \$ 1,709.74 |

Electric Light:

| | | | |
|---|----|----------|-------------|
| Inventory valuation January 1, 1896..... | | 126.75 | |
| Charged to this account during year..... | | 2,126.74 | |
| Inventory valuation December 31, 1896.... | \$ | | 127.95 |
| Balance to general expense..... | | | 2,125.54 |
| Total | \$ | 2,253.49 | \$ 2,253.49 |

House of Correction.

SUMMARY OF ACCOUNTS—Continued.

Dispensary:

| | | | |
|--|----|----------|-------------|
| Inventory valuation January 1, 1896..... | \$ | 398.25 | |
| Charged to this account during year..... | | 2,026.78 | |
| Inventory valuation December 31, 1896..... | \$ | | 1,148.78 |
| Balance to general expense..... | | | 1,276.25 |
| Total..... | \$ | 2,425.03 | \$ 2,425.03 |

Farm:

| | | | |
|---|----|----------|-------------|
| Inventory valuation January 1, 1896..... | \$ | 2,056.95 | |
| Charged to this account during year..... | | 782.65 | |
| Transferred from O. B. and F., teaming and cultivating grounds, roads and garden.... | | 537.00 | |
| Transferred from provision account for vege- tables furnished during year..... | | | \$ 372.05 |
| Inventory valuation December 31, 1896..... | | | 2,023.90 |
| Balance to general expense..... | | | 980.65 |
| Total..... | \$ | 3,376.60 | \$ 3,376.60 |

Omnibus, Barn and Forage:

| | | | |
|---|----|-----------|--------------|
| Inventory valuation, January 1, 1896..... | \$ | 4,799.33 | |
| Charged to this account during year..... | | 5,662.66 | |
| Received for sundries sold | | | \$ 31.25 |
| Transferred to manufacturing account, for teaming, hauling, etc | | | 1,339.00 |
| Transferred to farm account, for teaming, hauling, filling-in, cultivating grounds and garden | | | 537.00 |
| Transferred to construction account for la- bor, teams, hauling lumber and sundry material..... | | | 8.00 |
| Inventory valuation, December 31, 1896.... | | | 4,830.31 |
| Balance to general expense..... | | | 3,716.43 |
| Total | \$ | 10,461.99 | \$ 10,461.99 |

Salaries:

| | | | |
|--|----|-----------|--------------|
| Charged to this account during year..... | \$ | 27,418.32 | |
| Amount to general expense..... | | | \$ 27,418.32 |
| Total..... | \$ | 27,418.32 | \$ 27,418.32 |

Boarding Prisoners:

| | | | |
|---|----|-----------|--------------|
| Credited to this account during year..... | | | \$ 17,515.50 |
| Amount to general expense..... | \$ | 17,515.50 | |
| Total | \$ | 17,515.50 | \$ 17,515.50 |

SUMMARY OF ACCOUNTS—Continued.

Manufacturing Account :

| | | | |
|---|----|-----------|--------------|
| Inventory valuation, January 1, 1896..... | \$ | 7,582.50 | |
| Charged to this account during year..... | | 11,781.43 | |
| Transferred from O. B. and F. account, for amount of labor and teams at brick yard. | | 1,339.00 | |
| Received for brick sold, laundry work, can- ing chairs, making socks and brooms | | | \$ 27,802.46 |
| Inventory valuation, December 31, 1896..... | | | 7,861.95 |
| Balance to general expense | | 14,961.48 | |
| Total..... | \$ | 35,664.41 | \$ 35,664.41 |

Improvement and Repairs :

| | | | |
|---|----|----------|-------------|
| Inventory valuation, January 1, 1896..... | \$ | 530.26 | |
| Charged to this account during year | | 2,317.12 | |
| Sold old railroad iron..... | | | \$ 253.02 |
| Transferred to property account for labor on new cement walk, new coal shed and gen- eral repairs on buildings..... | | | 2,518.00 |
| Received for sundries sold..... | | | 4.95 |
| Inventory valuation December 31, 1896.... | | | 208.14 |
| Balance to general expense..... | | 136.73 | |
| Total..... | \$ | 2,984.11 | \$ 2,984.11 |

Construction :

| | | | |
|---|----|--------|-----------|
| Charged to this account during year..... | \$ | 248.52 | |
| Transferred from manufacturing account, material, brick, etc..... | | 58.50 | |
| Transferred from improvement and repairs account, labor of prisoners, material, etc. | | 298.00 | |
| Amount to property account..... | | | \$ 605.02 |
| Total..... | \$ | 605.02 | \$ 605.02 |

Real Estate :

| | |
|-----------------|--------------|
| Valuation | \$770,702.54 |
|-----------------|--------------|

Property Account :

| | | |
|---|--------------|--------------|
| Balance January 1, 1896..... | | \$778,458.17 |
| Sundry inventory, January 1, 1896..... | | 45,460.59 |
| Appropriation for 1896 | | 45,000.00 |
| Improvement and repairs to buildings..... | 2,825.02 | |
| Unexpended balance, appropriation of 1895. | 962.52 | |
| Charged to City Comptroller, account of of manufacturing account credited..... | | 52.48 |
| Inventory valuation, December 31, 1896.... | 51,382.55 | |
| General expense..... | 52,498.30 | |
| Balance, December 31, 1896 | 761,302.85 | |
| Total..... | \$868,971.24 | \$868,971.24 |

SUMMARY OF ACCOUNTS—Continued.

City of Chicago, City Comptroller :

| | | |
|---|---------------|---------------|
| Appropriation for 1896..... | \$ 45,000.00 | |
| Charged to this account in 1896..... | 57,769.93 | |
| Credited this account in 1896..... | | \$ 119,153.53 |
| Expenditures above appropriation and receipts | 15,421.08 | |
| Credited to City Comptroller's account on account of unexpended balance in 1895.. | 962.52 | |
| Total | \$ 119,153.53 | \$ 119,153.53 |

Balance December 31, 1896 :

| | | |
|------------------------------|---------------|---------------|
| Chicago Fire Department..... | \$ 15.00 | |
| Dog Pound..... | 2.48 | |
| City Comptroller..... | | \$ 15,368.60 |
| Police Department..... | 419.64 | |
| John Fitzpatrick Co..... | 101.67 | |
| B. Honig..... | 59.58 | |
| Ross, McRae & Ross..... | 225.00 | |
| Irwin Bros..... | 295.94 | |
| Town of Cicero..... | 24.60 | |
| Walter Baker..... | 150.00 | |
| Village of Lamont..... | 114.60 | |
| Chris Servis..... | | 12.50 |
| Cook County..... | 4,544.70 | |
| Village of Summit..... | 3.60 | |
| City of Evanston..... | 24.60 | |
| Property Account..... | | 761,302.85 |
| Real Estate | 770,702.54 | |
| Total | \$ 776,683.95 | \$ 776,683.95 |

It does not require the scrutiny of a close student of statistics to obtain from the preceding tables facts valuable in shaping policies for the care of the many that annually come in and go out at the House of Correction. But the facts are, these annual reports have long since become purely perfunctory. A clerical duty required of the management by law, only to be cast in the waste basket, while conditions remain the same as they were when Chicago was an unknown village. Protests emanating from the management against conditions forced upon them by ancient laws, fall upon deaf ears. The public seem too busy protecting itself against the

depredations of criminals, to give the question of prevention of crime any thought.

While I would not discourage any and all efforts towards the reformation of the habitual criminal, experience has taught me that the results are dispiriting, indeed. It seems, therefore, society of tomorrow demands a duty well performed today. And that duty is a well defined, intelligent effort toward shaping the human characters that are being moulded today. To the end that the habitual criminal class will not be augmented by many new and well-equipped recruits. We cannot do this by simply taking away individual liberty. We must surround the yet undeveloped character with a moral, intellectual and industrial atmosphere, or we must expect dwarfs.

On the first day of January, 1896, there were confined in the House of Correction, 787 males and 60 females, or a total of 847 ; an increase over the corresponding day of 1895, of 10 males and 5 females, or a total of 15. There were received during the year 1896, 8,541 males and 1,114 females, or a total of 9,655. Showing a prison population for the year of 9,328 males and 1,174 females, or a total of 10,502 ; an increase over the year 1895, in receipts, of 1,320 males and 57 females, or a total of 1,377 ; and an increase of population of 1,320 males and 62 females, or a total of 1,392.

The discharges for the year 1896, were 8,342 males and 1,104 females, or a total of 9,446. During the same period of 1895, there were discharged 7,210 males and 1,053 females, or a total of 8,263 ; thus showing an increase over 1895 in discharges, of 1,132 males and 51 females, or a total of 1,183. Leaving in prison, December 31, 1896, 986 males and 70 females, or a total of 1,056, as against 787 males and 60 females, or a total of 847 the year previous. An increase of 199 males and 10 females, or a total of 209.

By considering the three tables, "Offenses for which Convicted," "Fines and Terms of Sentences," and "From

What Source Received," together, to put it mildly, some very peculiar facts are obtained. For example : 389 prisoners were received from the Criminal Court of Cook County, convicted of crimes running through a long list, including "Assault to Kill," "Rape," "Larceny," "Burglary," "Robbery," "Mayhem," "Abandonment of Wife," "Forgery," etc. The shortest sentence was 15 days, and the longest one year and 81 days. Of the 389, $8\frac{1}{2}$ per cent paid the penalties of their crime by 30 days imprisonment ; $37\frac{3}{4}$ per cent by 90 days, and 64 per cent by six months. Such sentences, I apprehend, do not inspire any particular awe in the minds of the criminal classes. In regard to the commitments from Justices of the Peace and Police Court Magistrates, the same old story is retold. Of the 9,232 received from these sources, five were sent because they could not pay the court costs of \$1.50 ; 116, because they could not pay \$2.50 ; 2,930, on fines of \$6.50 or less ; and 5,338 on \$10 fines and costs, or less ; thus showing over 55 per cent were received on fines of \$10 and costs, or less. Such commitments are a continuous farce, in so far as resulting in any beneficial results to the public or the individuals, and are a downright imposition on the institution in many ways. Our every-day observation in receiving the "repeaters" on these small fines, coupled with the facts that over 53 per cent of the total number of prisoners received, were in prison before, make the two percentages appear at least a coincidence.

There are many formidable and urgent reasons for material change in the present system of commitment to the House of Correction. The fine system should be abolished, and direct sentences imposed. The fine system has not one redeeming quality. It is demoralizing to the individual by reason of the fact that when judgments are rendered it does not necessarily follow that it means imprisonment ; and if finally such disposition follows, it is only for a day or two, until friends can raise the money to pay the way out. Hence

the vicious have little fear of such proceedings. It stimulates crime by urging "pals" on the outside to greater efforts at lawlessness to secure the necessary money to pay the fine. It is destructive of discipline, for the reason that the prisoner knows he will only have to stay a short time, and, therefore, will give no thought to the rules of the Institution. It prevents us from treating their clothing in a manner consistent with good sanitary rules, because we do not know what minute we may be forced to discharge the prisoner. It is an imposition on the tax payers, because we are unable to obtain any results from their labor by reason of their short stay. I earnestly urge that an effort be made to change this system.

In the matter of "Ages of Prisoners," we received 936 boys, 17 years old and under, as against 886 in the year 1895, an increase of 50. We have opened the academic portion of the John Worthy Manual Training school, and hope to have the manual portion of it in operation by the middle of February. I have protested so much and so earnestly against being compelled to open this department under such incomplete and unsatisfactory conditions, that I don't feel called upon to add further to it. We hope to secure sufficient appropriation to carry out the intent of its founders. However, in this connection, we not only want an appropriation, but we urge a different system of commitment. Boys that it becomes necessary to send to this department of the House of Correction should be tried before some judge empowered to commit for longer terms than the law permits Police Court Magistrates. Let us take up the question of what will be done with the mischievous and incorrigible boy of today, and give our best efforts toward making him the law-abiding, honorable and industrious citizen of tomorrow, instead of the habitual criminal.

The table of "Ages of Prisoners" also shows that we received 196 prisoners between the ages of 61 and 80 years, all of whom should have gone to the poor house. And that

over 5 per cent of the prisoners received were 19 years old, the largest number of any other age. The number increases gradually from 10 years of age up to 19 years, and then gradually decreases to 80 years.

Of the 9,655 prisoners received during the year, 389 were from the Criminal Court; 8,916 from the Police Justices; 316 from Justices of the Peace; 32 from town authorities, and 2 of our 4 escapes were captured; and of the number received, almost 47 per cent admitted they had been in prison before, and 6 per cent could neither read nor write.

In the matter of releases, I submit the following table, covering the last seven years, showing the number of prisoners received each year, served full sentences, paid fines, pardoned by the Mayor, released on order of City Physician by reason of insanity, etc.; released on habeas corpus, released by other legal means, and how much was realized by payment of fines:

| Year. | Whole No. of prisoners released. | Served full sentences. | Paid a part or all of fine. | Pardoned by Mayor. | Released by reason of insanity, etc. | Released by writ of habeas corpus. | Released by other legal means. | Amount Collected. |
|----------|----------------------------------|------------------------|-----------------------------|--------------------|--------------------------------------|------------------------------------|--------------------------------|-------------------|
| 1890.... | 8,501 | 6,315 | 1,541 | 422 | 50 | 12 | 161 | \$13,784.13 |
| 1891.... | 8,089 | 5,899 | 1,191 | 799 | 41 | 25 | 134 | 10,860.70 |
| 1892.... | 9,118 | 6,151 | 1,376 | 1,262 | 30 | 67 | 232 | 13,049.35 |
| 1893 ... | 10,222 | 7,539 | 1,431 | 1,039 | 37 | 24 | 152 | 14,312.30 |
| 1894 ... | 9,513 | 6,701 | 1,194 | 1,380 | 71 | 62 | 105 | 999.00 |
| 1895.... | 8,263 | 6,136 | 1,255 | 631 | 41 | 108 | 92 | 10,323.25 |
| 1896.... | 9,446 | 7,287 | 1,431 | 358 | 46 | 35 | 289 | 10,209.35 |

The features deserving of special note in the foregoing table are the marked decrease in pardons by the Mayor, and the releases by habeas corpus proceedings. By consulting the records of this Institution, I find that the Mayor has pardoned a less number of prisoners than have been released by that means since 1879, while, with the exception of the years 1893 and 1894, our whole number of releases has been

largely in excess of any other year. The releases by habeas corpus proceedings showed a great improvement. Credit for this improvement is due to the police authorities and Police Magistrates for the care exercised in the arrests and convictions of prisoners.

Our death rate was larger than it has been since 1890—16 in number. Of this number 4 died before they were in the Institution twenty-four hours; two of this number it was necessary to hold Coroner's inquests over. One died in three days, and one in four days. Two others died suddenly, necessitating inquests. Otherwise the health of the Institution has been good. As to the detail work of the Medical Department, I respectfully refer to the City Physician, Dr. A. C. Cotton's report. His criticism of the sending of irresponsible people to a work house instead of proper asylums is timely and not too strong.

The imposition on the institution by reason of the commitment of persons to it that should go to the County Institutions is well brought out in the table under the heading of "How Employed." Leaving out the question of humanity, by reference to this table it will be found that we have lost 25,836 days' work of these people, not taking into consideration the unusual attention required to care for them, nor the necessary medical attention. In another portion of my report it will be seen that it cost the City of Chicago almost 33 cents per day to keep and work prisoners. In this statement the interest on money invested in plant and real estate is not considered. Hence, it has cost the City of Chicago \$8,525.88 in the care of persons that Cook County should unquestionably keep.

This same table brings out another question of importance. During the year we have had 52,766 days of idleness by reason of no work—an increase over 1895 of 11,511 days. At the rate of keeping this means a loss of \$17,302.78, not considering the more important consideration, the effect on

the individual, mentally and physically, and the elements of industry in him by the slow poison of idleness. It would be more humane to behead those that become the wards of the state than to make mental and physical wrecks and industrial dwarfs out of them by forcing them into idleness. Why not, therefore, shape all legislation in regard to prison labor from the basis that idleness must not be introduced in prisons. Tell prison managers what *may* be done in prisons and not constantly declare what *shall not*. There cannot be successful management of a prison without the moral support, at least, of the people. I know of no prison manager who would not gladly welcome a satisfactory solution of this prison-labor problem so long as it does not imply idleness. Let the problem be taken up and settled, and not be constantly introducing deceptive makeshifts.

Our daily average was 970.57, an increase over 1895, of 122. The average length of imprisonment was 36.79, as against 34.01 for the year previous.

Owing to the depressed conditions of business, our receipts were \$3,901.30 less than they were in 1895. They aggregate \$57,719.93. By reason of slack times we were obliged to carry over a million and a half brick, for which we could get no price warranting sale.

Our expenditures were \$118,088.53, as against \$110,711.19 the year previous, an increase of \$7,377.34. The cause of the excess of expenditures over last year, can be readily seen by referring to our daily average. We kept 122 prisoners daily in excess of last year, and by referring to the table following this, it will be seen that the "aggregate expense per prisoner per day," was \$0.3292, as against \$0.3573 for the year 1895. When asked by the City Comptroller for an estimate of appropriation necessary, besides our receipts, we asked for \$77,224. We were given but \$45,000. In a communication to the finance committee, before the appropriation bill was finally disposed of,

we assured them that it was utterly impossible to keep our expenses within this limit. Notwithstanding the most rigid economy, our expenses exceeded our allowance \$15,421.08.

Both Protestant and Catholic services have been held during the year. Attendance, while voluntary, has been large. The Protestant services were conducted by the Rev. John M. Chattin, with Miss Annie Hibbard in charge of the music. The Catholic services were conducted by Father Paul M. Ponziglione, S. J., assisted by the Visitation Aid Society. Thanks are due all assisting in these services for their faithful and earnest voluntary work.

My relations with the City Physician, Dr. A. C. Cotton, continues to be of the most satisfactory nature. His report submitted herewith, speaks for itself as to the medical attendance given those in need of the same.

In conclusion, I desire to return my sincere thanks to the Mayor and other members of the Board of Inspectors, for their help and valuable advice in the management of the Institution.

Respectfully,

MARK L. CRAWFORD,
Superintendent.

TABULAR STATEMENT, showing the number of Prisoners received at the House of Correction of the City of Chicago during each of the years 1872 to 1896, inclusive; the Number of Rations issued; Daily Average of Prisoners; Classified Expenditures; Total Expenditures; Expenditures per Prisoner per Year and per Day, exclusive of Construction and Manufacturing expenses; and Total Expenditures per Year and per Day, during each of the above mentioned years.

| STATEMENT SHOWING | From Jan. 15 to Dec. 31. | | | | |
|--|-----------------------------|-------------|-------------|-------------|-------------|
| | 1872 | 1873 | 1874 | 1875 | 1876 |
| Number of Prisoners Received..... | 6,636 | 5,934 | 5,471 | 4,603 | 5,611 |
| Rations Issued..... | 147,357 | 186,689 | 146,003 | 124,805 | 142,947 |
| Daily Average of Prisoners..... | 419.8 | 511½ | 400 | 342 | 390.57 |
| EXPENDITURES CLASSIFIED. | | | | | |
| Salaries..... | \$12,003.57 | \$13,339.18 | \$14,821.47 | \$17,547.66 | \$17,432.41 |
| Provisions..... | 12,608.15 | 14,694.26 | 13,414.14 | 11,575.73 | 11,262.87 |
| Bedding and Clothing..... | 6,015.72 | 3,676.91 | 3,153.10 | 2,832.23 | 2,433.82 |
| Fuel and Engineer's Department..... | 5,768.61 | 9,551.34 | 3,711.65 | 4,302.11 | 2,986.03 |
| Light..... | 460.46 | 2,14.54 | 403.90 | 227.50 | 315.71 |
| Furniture..... | 1,905.62 | 557.43 | 596.79 | 604.87 | 628.16 |
| Dispensary..... | 583.00 | 484.33 | 491.46 | 324.98 | 501.95 |
| Incidental Expenses..... | 2,404.40 | 1,787.97 | 1,586.62 | 1,429.67 | 1,637.41 |
| Transportation of Prisoners, and Barn and Forage..... | 4,198.27 | 4,822.87 | 5,914.58 | 4,469.84 | 3,843.53 |
| Farm..... | 132.19 | 119.61 | 94.01 | 86.10 | 64.10 |
| Improvements and Repairs..... | 600.00 | 1,611.59 | 868.84 | 470.45 | 944.35 |
| Total of above Expenditures..... | \$46,079.99 | \$50,870.63 | \$45,056.56 | \$43,871.14 | \$42,120.34 |
| Construction Expenditures..... | 10,481.81 | 17,541.60 | 6,199.04 | 3,606.19 | 3,344.95 |
| Manufacturing Expenditures..... | ..... | 26,298.71 | 9,574.88 | 8,435.91 | 6,006.08 |
| Total of Expenditures..... | \$56,561.80 | \$94,710.34 | \$60,830.48 | \$55,913.24 | \$51,471.37 |
| Expenditure per Prisoner per year, exclusive of Construction and Manufacturing Expenses..... | \$109.7665 | \$ 99.45¼ | \$112.64 | \$128.27 | \$107.84½ |
| Expenditure per Prisoner per day, exclusive of Construction and Manufacturing Expenses..... | .3118 | .27¼ | .3086 | .3512 | .2946 |
| Aggregate Expense per Prisoner per year..... | 134.73 | 185.16 | 152.07 | 163.49 | 131.78 |
| Aggregate Expense per Prisoner per day..... | ..... | .5073 | .4166 | .448 | .36 |
| | | | | | \$ 93.13½ |
| | | | | | 2552 |
| | | | | | 108.84½ |
| | | | | | 2982 |

TABULAR STATEMENT, showing the number of Prisoners Received at the House of Correction of the City of Chicago during each of the years 1872 to 1896, inclusive; the Number of Rations issued; Daily Average of Prisoners; Classified Expenditures; Total Expenditures; Expenditures per Prisoner per Year and Per Day, exclusive of Construction and Manufacturing Expenses; and Total Expenditures per Year and per Day, during each of the above mentioned years—(Continued).

| STATEMENT SHOWING | | 1878 | 1879 | 1880 | 1881 | 1882 | 1883 |
|---|--|--------------|--------------|--------------|--------------|--------------|--------------|
| Number of Prisoners Received | | 5,810 | 5,201 | 6,755 | 6,836 | 7,566 | 7,058 |
| Rations Issued | | 138,568 | 138,853 | 221,764 | 220,704 | 223,776 | 237,142 |
| Daily Average of Prisoners | | 279.3 | 380.43 | 606 | 604.3 | 613.1 | 650 |
| EXPENDITURES CLASSIFIED. | | 1878 | 1879 | 1880 | 1881 | 1882 | 1883 |
| Salaries | | \$ 14,617.82 | \$ 14,699.99 | \$ 16,338.05 | \$ 17,160.21 | \$ 18,187.06 | \$ 19,281.73 |
| Provisions | | 10,290.51 | 8,751.47 | 14,049.44 | 16,571.81 | 16,319.03 | 16,640.03 |
| Bedding and Clothing | | 2,733.49 | 1,988.33 | 2,744.28 | 4,374.99 | 3,050.84 | 3,390.00 |
| Fuel and Engineer's Department | | 2,784.01 | 2,123.02 | 4,135.02 | 3,796.78 | 5,593.40 | 4,714.48 |
| Light | | 294.44 | 151.27 | 312.72 | 234.42 | 271.23 | 274.00 |
| Furniture | | 482.41 | 513.65 | 895.23 | 1,284.43 | 1,025.51 | 1,119.30 |
| Dispensary | | 508.63 | 615.38 | 476.41 | 747.75 | 842.84 | 813.13 |
| Incidental Expenses | | 1,622.62 | 1,220.03 | 1,502.33 | 1,985.70 | 2,251.65 | 2,338.51 |
| Transportation of Prisoners, and Barn and Forage. | | 2,244.98 | 2,318.80 | 4,626.66 | 3,457.74 | 7,440.28 | 4,636.48 |
| Farm | | 57.45 | 41.42 | 71.12 | 62.28 | 88.58 | 46.03 |
| Improvements and Repairs | | 339.01 | 598.29 | 1,431.53 | 2,062.19 | 1,180.42 | 2,260.14 |
| Total of above Expenditures | | \$ 35,974.77 | \$ 32,021.65 | \$ 46,582.79 | \$ 51,738.30 | \$ 56,250.24 | \$ 55,513.83 |
| Construction Expenditures | | 7,736.56 | 643.95 | 726.77 | 7,767.77 | 3,689.24 | 3,291.98 |
| Manufacturing Expenditures | | 575.65 | 30.32 | 9,070.72 | 13,293.94 | 12,734.22 | 5,701.27 |
| Total of Expenditures | | \$ 44,286.98 | \$ 32,695.92 | \$ 56,380.28 | \$ 72,800.01 | \$ 72,673.70 | \$ 64,507.08 |
| Expenditure per Prisoner per year, exclusive of Construction and Manufacturing expenses | | \$ 94.75½ | \$ 84.17 | \$ 76.86 | \$ 83.91½ | \$ 91.584 | \$ 85.40½ |
| Expenditures per Prisoner per day, exclusive of Construction and Manufacturing expenses | | .2595 | .236 | .21 | .23 | .25½ | .234 |
| Aggregate Expense per Prisoner per year | | 116.65 | 85.94 | 93.03½ | 120.39 | 118.555 | 99.24 |
| Aggregate Expense per Prisoner per day | | .3196 | .2354 | .2542 | .33 | .3247 | .27 |

TABULAR STATEMENT, showing the number of Prisoners Received at the House of Correction of the City of Chicago during each of the years 1872 to 1896, inclusive; the Number of Rations Issued; Daily Average of Prisoners; Classified Expenditures; Total Expenditures; Expenditures per Prisoner per Year and per Day, exclusive of Construction and Manufacturing Expenses, and Total Expenditures per Year and per Day, during each of the above mentioned years—(Continued).

| STATEMENT SHOWING | | 1884 | 1885 | 1886 | 1887 | 1888 | 1889 | 1890 |
|--|--|--------------|--------------|---------------|---------------|---------------|---------------|--------------|
| Number of Prisoners Received..... | | 6,999 | 7,108 | 7,524 | 8,763 | 9,928 | 8,893 | 8,457 |
| Rations Issued | | 253,060 | 284,313 | 246,910 | 267,406 | 279,811 | 259,445 | 299,425 |
| Daily Average of Prisoners..... | | 691.4 | 641.95 | 676 | 732.8 | 764½ | 710.81 | 820.62 |
| EXPENDITURES CLASSIFIED. | | 1884 | 1885 | 1886 | 1887 | 1888 | 1889 | 1890 |
| Salaries..... | | \$ 19,587.78 | \$ 16,875.29 | \$ 17,664.67 | \$ 21,796.13 | \$ 24,195.78 | \$ 25,505.22 | \$ 20,477.46 |
| Provisions | | 15,182.72 | 15,989.44 | 17,737.10 | 19,966.83 | 22,001.34 | 19,098.70 | 24,496.99 |
| Bedding and Clothing | | 2,795.31 | 4,188.21 | 6,224.08 | 2,486.38 | 7,270.54 | 6,122.31 | 5,102.74 |
| Fuel and Engineer's Department | | 4,529.61 | 6,445.27 | 5,402.31 | 4,896.34 | 4,018.38 | 4,563.33 | 8,263.37 |
| Light | | 85.45 | 193.71 | 205.22 | 172.99 | 367.25 | 244.45 | 295.88 |
| Furniture..... | | 566.24 | 464.43 | 1,126.29 | 786.18 | 1,206.21 | 613.05 | 3,278.51 |
| Dispensary | | 979.68 | 1,188.70 | 1,349.96 | 2,007.52 | 1,011.27 | 832.65 | 1,024.03 |
| Incidental Expenses | | 2,849.80 | 3,099.52 | 2,035.30 | 1,977.80 | 2,716.11 | 2,529.06 | 2,628.12 |
| Transportation of Prisoners, and Barn and Forage | | 4,679.91 | 5,982.18 | 7,206.42 | 3,950.50 | 5,373.42 | 4,684.42 | 5,983.59 |
| Farm | | 40.65 | 38.86 | 518.37 | 376.49 | 631.10 | 79.25 | 888.21 |
| Improvements and Repairs..... | | 2,140.86 | 878.31 | 1,095.79 | 592.20 | 4,425.20 | 1,427.69 | 1,728.76 |
| Total of above Expenditures..... | | \$ 53,388.01 | \$ 55,313.92 | \$ 60,505.51 | \$ 59,009.55 | \$ 73,216.60 | \$ 65,699.53 | \$ 74,177.66 |
| Construction Expenditures | | 1,508.20 | 654.08 | 36,476.89 | 62,638.31 | 51,293.29 | 55,039.11 | 17,786.56 |
| Manufacturing Expenditures | | 5,783.57 | 5,886.20 | 5,103.47 | 5,448.89 | 13,311.10 | 3,536.87 | 7,567.03 |
| Total of Expenditures | | \$ 60,684.78 | \$ 61,854.20 | \$ 102,235.87 | \$ 127,096.75 | \$ 137,820.99 | \$ 124,875.51 | \$ 99,531.25 |
| Expenditure per Prisoner per year, exclusive of Construction and Manufacturing Expenses..... | | \$ 77.217 | \$ 86.16 | \$ 89.53.22 | \$ 80.52 | \$ 95.77 | \$ 92.43 | \$ 89.87 |
| Expenditure per Prisoner per day, exclusive of Construction and Manufacturing Expenses..... | | .211 | .236 | .2453 | .226 | .2618 | .2582 | .288 |
| Aggregate Expense per Prisoner per year..... | | 87.771 | 96.3403 | 151.1324 | 173.42 | 180.27 | 175.69 | 120.75 |
| Aggregate Expense per Prisoner per day..... | | .24½ | .264 | .4140 | .4751 | .4925 | .4813 | .3154 |

TABULAR STATEMENT, showing the number of Prisoners Received at the House of Correction of the City of Chicago during each of the years 1872 to 1896, inclusive; the Number of Rations Issued; Daily Average of Prisoners; Classified Expenditures; Total Expenditures; Expenditures per Prisoner per Year and per Day, exclusive of Construction and Manufacturing Expenses, and Total Expenditures per Year and per Day, during each of the above mentioned years—(Continued).

| STATEMENT SHOWING | | 1891 | 1892 | 1893 | 1894 | 1895 |
|---|--|--------------|---------------|---------------|---------------|---------------|
| Number of Prisoners Received | | | | | | |
| Rations Issued | | 8,249 | 9,262 | 10,109 | 9,321 | 8,278 |
| Daily Average of Prisoners | | 306,496 | 366,608 | 379,890.5 | 356,374 | 309,795 |
| | | 839.7 | 1,004.7 | 1,040.8 | 976.36 | 848.75 |
| EXPENDITURES CLASSIFIED. | | 1891 | 1892 | 1893 | 1894 | 1895 |
| Salaries | | \$ 18,121.27 | \$ 21,306.21 | \$ 24,356.17 | \$ 24,257.39 | \$ 24,845.90 |
| Provisions | | 30,231.91 | 34,719.11 | 35,919.88 | 33,344.05 | 30,504.21 |
| Bedding and Clothing | | 6,148.96 | 5,924.80 | 7,617.01 | 5,861.35 | 7,157.67 |
| Fuel, Engineer's Department | | 10,625.65 | 12,062.32 | 14,313.30 | 14,289.51 | 12,802.22 |
| Light | | | | | | |
| Furniture | | 2,018.60 | 1,268.01 | 748.97 | 540.64 | 873.15 |
| Dispensary | | 1,332.89 | 1,827.31 | 1,967.11 | 2,275.61 | 2,288.53 |
| Incidental Expenses | | 3,352.30 | 4,692.46 | 5,070.98 | 5,876.38 | 4,782.33 |
| Transportation of Prisoners, and Barn and forage. | | 6,619.54 | 7,176.56 | 7,037.56 | 6,700.61 | 5,890.98 |
| Farm | | 807.20 | 483.81 | 405.22 | 326.15 | 800.39 |
| Improvements and Repairs | | 2,084.74 | 5,028.17 | 1,523.28 | 2,471.70 | 4,258.76 |
| Electric Light | | 355.67 | 7,377.83 | 900.35 | 3,339.05 | 2,363.25 |
| Tools and Implements | | 177.57 | 177.34 | 104.10 | 100.92 | 93.37 |
| School and Library | | | 685.41 | | | |
| Total of above Expenditures | | \$ 82,446.30 | \$ 102,729.34 | \$ 100,023.93 | \$ 99,283.36 | \$ 96,000.76 |
| Construction Expenditures | | 5,784.45 | 7,835.83 | 21,980.64 | 2,900.98 | 1,848.75 |
| Manufacturing Expenditures | | 11,762.15 | 10,780.94 | 11,412.47 | 11,644.47 | 12,261.68 |
| Total of Expenditures | | \$ 99,992.90 | \$ 121,346.11 | \$ 133,417.04 | \$ 113,828.81 | \$ 110,711.19 |
| Expenditure per Prisoner per year, exclusive of Construction and Manufacturing Expenses | | \$ 98.18 | \$ 102.25 | \$ 96.10 | \$ 101.68 | \$ 113.81 |
| Expenditure per Prisoner per day, exclusive of Construction and Manufacturing Expenses | | .269 | .28 | .2633 | .2785 | .3118 |
| Aggregate Expense per Prisoner per year | | 119.07 | 120.78 | 128.19 | 116.59 | 130.44 |
| Aggregate Expense per Prisoner per day | | .3262 | .338 | .3512 | .3192 | .3573 |

TABULAR STATEMENT, showing the number of Prisoners Received at the House of Correction of the City of Chicago during each of the years 1872 to 1896, inclusive; the Number of Rations issued; Daily Average of Prisoners; Classified Expenditures; Total Expenditures per Prisoner per Year and per Day, exclusive of Construction and Manufacturing Expenses; and Total Expenditures per Year and per Day, during each of the above mentioned years.—(Concluded).

| STATEMENT SHOWING | 1896 | | 1896 | | Expenditures, 1872-1896, Inclusive. | | |
|--|--------------|-----------|----------|-----------------|-------------------------------------|-----------|----------|
| | PER YEAR. | | PER DAY. | | Grand Total. | Per Year. | Per Day. |
| | | | | | | | |
| Number of Prisoners Received..... | 9,655 | | | | 185,557 | | |
| Rations Issued..... | 355,230 | | | | 7,021,279 | | |
| Daily Average of Prisoners..... | 970.57 | | | | 16,504.28 | | |
| EXPENDITURES CLASSIFIED. | | | | | | | |
| Salaries..... | \$ 27,418.32 | \$ 28.25 | \$.0772 | \$ 478,635.88 | \$ 29,0007 | \$.0792 | |
| Provisions..... | 34,502.20 | 35.92 | .0980 | 493,689.15 | 29,9127 | .0817 | |
| Bedding and Clothing..... | 10,781.97 | 11.11 | .0304 | 117,397.86 | 7,1317 | .0194 | |
| Fuel, Engineer's Department..... | 13,054.16 | 12.45 | .0340 | 168,317.08 | 10,1983 | .0278 | |
| Light..... | | | | 5,113.67 | 3,098 | .0008 | |
| Furniture..... | 1,005.69 | 1.03 | .0028 | 24,688.41 | 1,4858 | .0040 | |
| Dispensary..... | 2,026.78 | 2.09 | .0057 | 27,023.24 | 1,6373 | .0044 | |
| Incidental Expenses..... | 5,969.38 | 6.15 | .0168 | 68,885.93 | 4,1738 | .0114 | |
| Transportation of Prisoners, and Barn and Forage..... | 5,662.66 | 5.83 | .0159 | 127,647.23 | 7,7341 | .0211 | |
| Farm..... | 782.65 | .81 | .0022 | 7,073.70 | 4285 | .0011 | |
| Improvement and Repairs..... | 2,162.62 | 2.23 | .0061 | 42,940.33 | 2,6017 | .0071 | |
| Electric Light..... | 2,126.74 | 2.19 | .0060 | 17,022.89 | 1,0314 | .0028 | |
| Tools and Implements..... | 155.91 | .16 | .0004 | 809.21 | .0490 | .0001 | |
| School and Library..... | | | | 685.41 | .0015 | | |
| Total of above Expenditures..... | \$106,009.08 | \$ 108.22 | \$.2955 | \$ 1,579,929.99 | \$ 95,7463 | \$.2611 | |
| Construction Expenditures..... | 298.02 | .31 | .0008 | 334,898.82 | 22,9133 | .0626 | |
| Manufacturing Expenditures..... | 11,781.43 | 12.14 | .0329 | 213,527.76 | 12,9377 | .0376 | |
| Total of Expenditures..... | \$118,088.53 | \$ 120.67 | \$.3292 | \$ 2,128,356.57 | \$ 131,5973 | \$.3563 | |
| Expenditure per Prisoner per year, exclusive of Construction and Manufacturing Expenses..... | \$ 108.22 | \$ 108.22 | | | \$ 95.7463 | | |
| Expenditure per Prisoner per day, exclusive of Construction and Manufacturing Expenses..... | .2955 | | | | | | |
| Aggregate Expense per Prisoner per year..... | 120.67 | 120.67 | \$.2955 | | | \$.2611 | |
| Aggregate Expense per Prisoner per day..... | .3292 | | .3292 | | | 131.5973 | .3563 |

PHYSICIAN'S REPORT.

To the Honorable Board of Inspectors of the House of Correction, of the City of Chicago :

GENTLEMEN — Presented herewith is my second annual report, as your medical officer.

The past year has been a very trying one to the medical department, as it has offered an unusual number of difficult problems as to the best care and treatment of the sick and diseased in this institution.

The commitments have far exceeded those of previous years, and the diseased and degenerate classes admitted, have been largely in excess of those heretofore received. Notwithstanding this, the health of the prison has, in the main, been good. No epidemic has made its appearance—cleanliness and proper sanitary precautions, having helped to this end—and while our death rate has slightly exceeded that of last year, yet its percentage is small in comparison with the large number of disorders treated. There are still sent to this prison insane and idiotic persons, also those wrecks, partially or wholly irresponsible from the effects of drink or drug habits. That these unfortunates are sent to a workhouse rather than to a curative asylum is an outrage that will continue until some adequate institution is provided for their reception.

During the past year thirty of our prisoners have been transferred to different asylums for the care of the insane.

Upon admission, each prisoner is examined as to his physical and mental condition, also in regard to vaccination, and if necessary, is vaccinated ; primary and secondary vacci-

nation having been found necessary in eight hundred and forty-four cases.

The following table contains a review of medical services rendered in our hospital wards and cell houses, including also female dormitory ; the classification of the different diseases and injuries treated, is appended hereto:

| MONTHS. | Hospital. | Cell-Houses and Dormitory. | Total. | Deaths. |
|----------------|-----------|----------------------------------|--------|---------|
| January..... | 16 | 548 | 564 | ..... |
| February..... | 18 | 612 | 630 | 2* |
| March..... | 13 | 412 | 425 | 2 |
| April | 15 | 437 | 452 | 1 |
| May | 44 | 394 | 438 | 3* |
| June..... | 35 | 705 | 748 | 2 |
| July | 31 | 748 | 779 | 2 |
| August | 28 | 645 | 673 | 1* |
| September..... | 21 | 596 | 617 | ..... |
| October..... | 15 | 610 | 625 | ..... |
| November..... | 13 | 742 | 755 | 1 |
| December | 17 | 864 | 881 | 2* |
| Total | 266 | 7,313 | ..... | ..... |

*In February, one coroner's death certificate.

In May, one coroner's death certificate.

In August, one coroner's death certificate.

In December, one coroner's death certificate.

HOSPITAL CASES.

| | |
|-----------------------------|-----|
| Abscesses of all kinds..... | 15 |
| Asthma | 1 |
| Aortic regurgitation..... | 1 |
| Cerebral hemorrhage | 2 |
| Cerebritis | 3 |
| Conjunctivitis | 1 |
| Cocaine habit | 1 |
| Cyst on scalp..... | 1 |
| Delirium tremens | 104 |
| Dementia | 5 |

HOSPITAL CASES—Continued.

| | |
|-------------------------------------|-----|
| Diarrhoea..... | 4 |
| Dropsy..... | 1 |
| Dysentery..... | 19 |
| Eczema..... | 1 |
| Enteritis..... | 1 |
| Epistaxis..... | 2 |
| Epilepsy..... | 3 |
| Erysipelas..... | 5 |
| Fracture of clavicle..... | 1 |
| Fracture of nose..... | 1 |
| Fracture of finger phalanx..... | 1 |
| Fracture of jawbone..... | 1 |
| Fistula in ano..... | 2 |
| Gastritis..... | 10 |
| Heart Disorders..... | 4 |
| Hemoptysis..... | 3 |
| Injury to back..... | 1 |
| Insanity..... | 12 |
| Jaundice..... | 1 |
| Malaria..... | 2 |
| Malingering..... | 2 |
| Melancholia..... | 1 |
| Morphine habit..... | 2 |
| Neuralgia..... | 1 |
| Pericarditis..... | 1 |
| Pleurisy..... | 1 |
| Phthisis pulmonalis..... | 7 |
| Pneumonia..... | 9 |
| Rheumatism (acute)..... | 9 |
| Syphilis..... | 4 |
| Suicide by poison..... | 1 |
| Tonsillitis..... | 3 |
| Typhoid fever..... | 12 |
| Ulcerated sore throat..... | 2 |
| Wounds of different characters..... | 2 |
| Total..... | 266 |

We have studied economy with regard to our medical expenses, the amount being \$741.38, for the past year, or 7 cents per capita per annum, a showing that will compare favorably with that of any prison report at my command.

There occurred within the year sixteen deaths out of the

prison population of 10,502. Twelve of these died within the regular course of disease, and we were enabled to bestow all necessary medical attention. The remaining four required coroner's inquests, on account of sudden demise—in one case a suicide, the poison having been taken before admission to the prison.

A little study of the following death record enables one experienced in this class of cases, to assert truthfully, that their deaths were in the main hastened by their vicious and intemperate habits of life.

DEATH RECORD.

1. Frank Anderson, male, white, age 28 years. Received in suffering condition, the consequences of taking rough on rats with suicidal intent. Died two hours after admission. Coroner's inquest, and death certificate February 12th.

2. Henry Long, male, white, age 46 years. Received in bad health on February 5th. Died of pneumonia, February 15th.

3. Annie, alias Maggie McFadden, female, white, age 47 years. Received in bad condition. Died March 7th, of cerebritis, undoubtedly due to her constant indulgence in alcoholic stimulants.

4. James Lunnan, male, white, age 39 years. Died March 27th, of cerebral hemorrhage.

5. M. S. McLaughlin, male, white, age 30 years. Received in bad condition, suffering from epilepsy and cocaine habit. Died of syncope, April 3d.

6. Geo. Taylor, male, white, age 60 years. Received in a hopeless condition. Died May 9th, of heart failure. Coroner's death certificate, May 12th.

7. John Reiermann, male, white: age 44 years, a sufferer from epilepsy for years. Died of apoplexy, May 12th.

8. John Crowley, male, white, age 34 years. Received suffering with delirium tremens. Died May 12th of same.

9. John Hutching, male, white, age 34 years. Received in a dying condition, suffering from pulmonary tuberculosis. Died June 17th.

10. James McNally, male, white, age 45 years. Died of heart failure, June 29th.

11. Joseph Kelly, male, white, age 25 years. Died of perforation of bowels, July 1st, suffering from typhoid fever.

12. Fred Hoffman, male, white, age 42 years. Received suffering with delirium tremens. Died July 1st.

13. Eliza Newton, female, white, age 50 years, a habitue of this prison for years past. Found dead August 1st. Coroner's inquest and death certificate August 1st, stating heart failure as cause of demise.

14. J. Murphy, male, white, age 56 years. Died of pericarditis, November 1st.

15. Nellie Stevens, female, white, age 34 years. Found dead December 3d. Coroner's inquest and death certificate, giving as cause aortic regurgitation.

16. Nicholas Lynch, male, white, age 49 years. Died of cerebral hemorrhage, December 28th.

It was necessary to transfer from this institution to the Cook County Hospital twelve prisoners, either for operation or because of expiration of term. Four also were transferred to the County Infirmary.

In closing this report, I desire to express my appreciation of the uniform courtesy and co-operation extended to me by Superintendent Crawford and Deputy McClaughry, also of the efficient services of Hospital-Steward Marheineke, to whom is largely due the highly satisfactory results herein set forth. I have the honor to be

Very respectfully yours,

A. C. COTTON, M. D.,

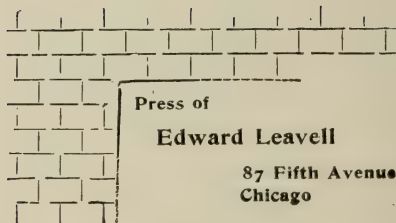
City Physician.

Section VI.

REPORT
OF THE
General Superintendent of Police
OF THE
CITY OF CHICAGO,
TO THE
CITY COUNCIL
FOR THE
FISCAL YEAR ENDING DECEMBER 31, 1896.



CHICAGO:
PUBLISHED BY THE DEPARTMENT OF POLICE.
1897.



Press of

Edward Leavell

**87 Fifth Avenue
Chicago**

OFFICE OF THE

General Superintendent of Police.

APRIL 1, 1897.

TO THE HONORABLE, THE MAYOR, AND THE CITY COUNCIL,
OF THE CITY OF CHICAGO :

Gentlemen:—I have the honor to submit herewith, the Annual Report of the Department of Police, for the year ending December 31, 1896, together with a resume of facts and data pertaining to the relief work done by this department during the recent cold weather.

The total amount appropriated for the expenses of the department for the year ending December 31, 1896, was \$3,375,739.94. The total expenditures of the department during the year, as shown in detail by the report of the Secretary, a copy of which is herewith submitted, are \$3,304,308.77. By the practice of strict economy in the management of the affairs of the department, notwithstanding the fact that the numerical strength of the department was kept fully up to the maximum provided for in the appropriation, a saving of \$71,431.17 was effected, and this amount was covered back into the general fund at the close of the year.

The total estimated value of property in the department is \$1,140,470.44.

The total number of arrests made during the year is 96,847, as against 83,464 for the year ending December 31, 1895, showing an increase in the number of arrests of 13,383.

The total amount of fines assessed during the year is \$300,319.00, as against \$301,555.00 for the previous year, showing a decrease of \$1,236. The result, as shown above clearly indicates increased activity and fidelity to duty on the part of the force which is very gratifying.

The extraordinary demands made upon the department Chicago Day, and again at the presidential election, were met and discharged with a zeal and fidelity on the part of the officers and men such as to afford all good citizens of Chicago profound satisfaction and challenge the encomiums of the press upon the conduct of the department. On election day the department performed strict police duty, abstaining entirely from any participation in the election other than to quietly cast its ballots in accordance with the dictates of conscience. The discipline and arrangements were such that not a single fracas occurred at any polling place in the city between the hours of 6 A. M. and 4 P. M., during the time the election was in progress. A new departure was made in that all saloons and drinking places were closed, *absolutely*, during those hours, for the first time in the history of the city. The excellent results of this policy clearly demonstrated the wisdom of the enforcement of the law, and argues strongly in favor of a rigid adherence to this feature in the management of all future elections.

Notwithstanding the many strikes, lock-outs, etc., that have occurred, I am pleased to report that the policy of the department has met with the uniform approbation of organized labor and capital, both having been treated with equal consideration. The department interfered only to protect life and property.

During the past year the department has called upon the Civil Service Commission for 369 men, and I am pleased to note the high character of the men supplied and the promptness with which they have been certified. Several examinations have been held under civil service rules for promotion in the different grades of the service, and the members of the department have entered into the competition with enthusiasm, apprehending fully the meaning of the law and the benefits conferred upon them. It seems to meet with their hearty approval, and the only expressions of regret that have come to my notice are such as have come from those who were members of the department before the adoption of the civil service law, and indicated regret that they had not been appointed under that law. While in a measure protected by the civil service law such members of the

department are not as wholly protected as are those who have become members since that law went into practical effect.

The discipline and *esprit de corps* of the department during the past year has been constantly improving, and the men, from what I have been able to learn, are satisfied with the mode of discipline in force in this department. While the discipline of offenders has been severe, the men who have sought to discharge their duty faithfully, have felt themselves secure in their positions. I have no doubt the merit system, which controls all promotions in the department since the adoption of the civil service law, has acted as a spur to the men and officers of the department to more zealous work and a more faithful attention to duty.

The department should be largely increased, and in my estimate for the current year I asked for 300 additional men, which, owing to the financial condition of the city, you have seen fit to disallow. This I regret, as the number of men in the department is wholly inadequate to properly patrol the large area of the city, covering as it does one hundred and ninety square miles. No policeman's post in the City of Chicago is less than one mile in length, whereas in many of the eastern cities, and in the cities of the old world, the officer is not expected to cover more than one-eighth of the smallest post covered by our officers.

During the past year a new field of usefulness was opened to the department by the destitution and suffering among the poor of the city, through the extreme inclemency of the weather, during the months of January and February, when, for a protracted period, the thermometer ranged from 5 to 20 degrees below zero, and the further fact that thousands of the honest working people of the city had been without work for the greater portion of the time during the winter months, and that the general depression in trade during the past three years, with the reduced wages and lack of opportunity to work incident thereto, had caused them to exhaust their savings of former years.

On the evening of January 24, 1897, His Honor, the Mayor, ordered me by telephone to make arrangements for the

relief of the suffering and destitute. By nine o'clock on the following morning, all the heads of the department were called in consultation as to the best means of distribution of supplies. Large quantities of food and fuel were purchased, and the members of the department were called upon to assist in the distribution of the same; and, to the credit of the department be it said, every member thereof without exception, entered upon the work with a spirit and determination worthy of the highest praise. I believe that never in the history of the department have the officers worked harder or with more self sacrificing devotion to their duty than when carrying food and fuel to our deserving but unfortunate fellow citizens. Every police station, for the time being, was turned into a distributing station of relief, and the forty stations of the department, being equally distributed about the city, made convenient points from which the poor in all parts of the city obtained speedy relief.

During the first week no investigation was made as to the merit of the applications, the intense suffering existing imperatively demanding instant relief. After this had been accomplished the work of granting relief was thoroughly systematized, all applications for relief were regularly recorded and thorough investigation of the same made by the officers of the district, and, I am pleased to say, that in view of the strict surveillance thereafter maintained over the distribution of assistance, comparatively few impositions were attempted.

The open-handed charity of the people of our city, and their prompt and generous response to the appeal of His Honor, the Mayor, for contributions to the relief of the poor made it possible for us to afford satisfactory relief to all in need. These contributions amounted to \$62,000 in cash, together with donations of thousands of dollars worth of food, fuel and clothing.

At the expiration of the first week, the weather having moderated somewhat, a fixed ration was established, and for families of four persons, the following relief was given, to last for the period of five days :

| | | | |
|---|---|---|---|
| Five pounds Beef, - (for families of four or less). | | | |
| Five pounds Cornmeal, | " | " | " |
| Five pounds Peas, | " | " | " |
| Five pounds Beans, | " | " | " |
| Four Loaves of Bread, | " | " | " |
| 200 pounds of Coal, | " | " | " |

We found that this supply of provisions and coal were sufficient to keep a family of that number of persons in health, strength and warmth. For families of greater number this ration was increased proportionately.

Supplies were purchased from the most reliable business houses in the city, who heartily co-operated with the department by giving us the advantage of the lowest wholesale price on everything we bought. Meats were furnished by Armour & Co., Swift & Co., Nelson Morris & Co., Arnold Brothers, and Oscar Mayer; beans, peas and meal were furnished by Franklin McVeagh, W. M. Hoyt Co., Reid, Murdoch & Co., McNeil & Higgins Co., and W. J. Quan & Co., with the exception of one car load bought on the Board of Trade; bread was furnished by D. F. Bremner Baking Co., Wm. Schmidt Baking Co., F. E. Coyne, H. H. Kohlsaas and others.

We furnished supplies daily from January 25th until February 20th. During that time we spent a total of \$61,855.-81. Orders for meat during that time amounted to 546,232 lbs., costing, at an average of 4.22 cents per pound, \$23,084.76. Orders for bread aggregated 470,736 pounds, and cost, at an average of 2.82 cents per pound, \$13,296.90. At an average cost of one cent per pound, our orders for beans, peas and meal amounted \$9,750.48. And for coal, our orders amounting to 6,004 1-5 tons, at an average of \$2.28½ per ton, \$13,720.72 was expended. In addition to the expense stated above, \$439.44 was paid for cartage of coal which had been donated.

Supplies of food and fuel were furnished to 65,557 families, an average of 2,731 families per day; a total of 304,802 persons, and an average of 12,700 supplied daily.

Besides the purchased supplies given out, the following goods and materials received by donation were distributed:

| DONOR. | CONTRIBUTION. |
|---|------------------------------------|
| The Chicago & Montana Coal Co..... | 25 car loads coal, est. 750 tons. |
| Baltimore & Ohio Railway Co. | Transp't'n on above, est. \$1,600. |
| J. S. Bessman..... | 1 car load of coal. |
| Fruit Growers' Assoc'n, Cobden, Ill.... | 1 car load of sweet potatoes. |
| The Managers of the Hub Clothing Co... | 250 tons of coal. |
| Sprague, Warner & Co... .. | 600 gallons of chicken soup. |
| Produce Dealers of South Water St.... | 4 wagon loads of provisions. |
| Isaac Woolf, Madison and Halsted Sts.. | \$1,000 worth of clothing. |
| The Putnam Clothing Co..... | \$1,000 worth of clothing. |
| The Collins Ice Cream Co..... | \$102 in restaurant meal tickets. |
| Mrs. Heaton Owsley..... | 4 cases womens' new underwear. |
| Thompson & Taylor Spice Co..... | 500 pounds of coffee. |
| F. S. Lewis..... | 2,000 pounds of fish. |
| Triggs, Atchison & Co..... | 2,000 pounds of fish. |
| Southern Fish Co..... | 4,000 pounds of fish. |
| A. Booth Packing Co..... | 4,000 pounds of fish. |
| Siegel, Cooper & Co..... | 18,000 loaves of bread. |
| H. Bauman & Co..... | 3,300 loaves of bread. |
| Northwestern Yeast Co..... | 3,000 loaves of bread. |
| Steele-Wedeles Co..... | 100 sacks of flour. |
| Lyon Brothers, 214 E. Madison St..... | 200 pairs of blankets. |
| Smith-Wallace Shoe Co..... | \$175 worth of shoes. |

In addition to the above, the following goods were contributed by the merchants of our city :

| | | |
|-------------------------|---------------------|-----------------------------|
| 14,450 pounds of meats. | 168 sacks of flour. | 220 pkgs. of pancake flour. |
| 27 bags of beans. | 35 bu. potatoes. | 240 boxes of crackers. |
| 12 gallons of milk. | 27 bags of meal. | 1 box of cloaks. |
| 300 pounds of rice. | 3 cases of caps. | 100 pounds tapioca. |
| 15,000 loaves of bread. | 100 tons of coal. | 10 cases of shoes. |
| 750 pounds of sausage. | 2 chests of tea. | 5 barrels of oatmeal. |

Together with miscellaneous clothing to the amount of \$500.

The above contributions were all carefully distributed by the department. Every dollar that was contributed to the Mayor's Fund bought one dollar's worth of goods for the poor. There was not one cent of this paid out for salary, extra time, room rent, or for any other expense.

On February 20th, the weather having moderated, it was thought advisable to gradually discontinue further distribution of relief, and thereafter only the most extreme and deserving cases were considered.

The members of the department were so thoroughly satisfied of the necessity of extending aid to the poor and with the practical method employed in the distribution, that they voluntarily contributed the sum of \$1,680 toward the furtherance of the work.

A notable fact, incident to the distribution of relief by the city, was the great reduction in the number of crimes committed while relief was being given, thus clearly indicating that which was already well known to the department, and establishing the truth of the fact that a great many of the crimes and misdemeanors prevalent during the past winter, were simply the result of the desperate condition of the poor. There seemed to them to be no alternative other than to steal or starve.

To the Honorable, the Mayor, and the Honorable City Council, I return my sincere thanks for the kindness and assistance extended to this department during the year.

To the officers and men of the department I convey my personal thanks and congratulations upon their efficient and zealous discharge of duty, without which the excellent results which have have been achieved would have been impossible.

Herewith you will find submitted the various tables which go to make up the substance of my report.

J. J. BADENOCH,

General Superintendent.

ENUMERATION OF FORCE.

The total number of men constituting the force at date is 3,425, assigned to duty as follows :

| | |
|--|-------|
| General Superintendent..... | 1 |
| Assistant Superintendent..... | 1 |
| Superintendent's Private Secretary | 1 |
| Secretary, rank of Captain..... | 1 |
| Inspectors..... | 4 |
| Clerks in Secretary's Office..... | 3 |
| Chief Clerk of Detectives..... | 1 |
| Superintendent Bureau of Identification..... | 1 |
| Photographer Assistants..... | 2 |
| Stenographers..... | 2 |
| Printer..... | 1 |
| Assistant Printer..... | 1 |
| Veterinary Surgeon..... | 1 |
| Assistant Veterinary Surgeon..... | 1 |
| Captains..... | 15 |
| Lieutenants..... | 56 |
| Lieutenants of Detectives..... | 2 |
| Sergeants of Detectives..... | 2 |
| Patrol Sergeants..... | 98 |
| Detective Sergeants..... | 51 |
| Desk Sergeants..... | 103 |
| Retired Haymarket Pensioners..... | 23 |
| First Class Patrolmen for Duty on Crossings and Bridges..... | 538 |
| First Class Patrolmen for Duty on Patrol Wagons..... | 176 |
| First Class Patrolmen for Patrol Duty..... | 1,794 |
| Custodian..... | 1 |
| Poundkeeper..... | 1 |
| Inspectors of Vehicles..... | 4 |
| Chief Operator..... | 1 |
| Assistant Chief Operator..... | 1 |
| Operators..... | 119 |
| Substitute Operators..... | 10 |
| Drivers of Patrol Wagons..... | 94 |
| Substitute Drivers..... | 6 |
| Supply Drivers..... | 11 |
| Engineers..... | 8 |
| Assistant Engineers, eight months..... | 7 |
| Janitors..... | 29 |

| | |
|---------------------------------|-------|
| Hostlers..... | 10 |
| Chief Matron..... | 1 |
| Matrons..... | 30 |
| Watchman..... | 1 |
| Foreman Repair Shop..... | 1 |
| Painters in Shop..... | 4 |
| Wagon Makers..... | 2 |
| Carpenters..... | 7 |
| Blacksmiths..... | 3 |
| Blacksmith Helpers..... | 3 |
| Saddlers and Harnessmakers..... | 2 |
| Plumbers... .. | 1 |
| Foreman of Construction..... | 1 |
| Painters and Calciminers | 6 |
| Laborers..... | 13 |
| Probationary Patrolmen..... | 169 |
| Feed Inspector..... | 1 |
| <hr/> | |
| Total..... | 3,425 |

FIRST DISTRICT.

FIRST PRECINCT.

Monroe Street and Michigan Avenue.

| | |
|---|-----|
| Captain..... | 1 |
| Lieutenants..... | 3 |
| Patrol Sergeants..... | 5 |
| Desk Sergeants..... | 3 |
| Patrolmen on patrol duty | 54 |
| Patrolmen detailed in plain dress..... | 4 |
| Patrolmen detailed in Signal Service..... | 8 |
| Patrolmen detailed on permanent post duty | 229 |
| Patrolmen detailed on special duty..... | 37 |
| Vehicle Inspectors..... | 4 |
| Patrolman detailed on license..... | 1 |
| Total..... | 349 |

This precinct is bounded on the north by the Chicago river, on the east by Lake Michigan, on the west by the Chicago river, and on the south by Van Buren street.

The area is about three-fourths square miles.

Population, about 15,000.

SECOND DISTRICT.

SECOND PRECINCT.

Harrison Street and Pacific Avenue.

| | |
|---|-----|
| Captain..... | 1 |
| Lieutenants..... | 2 |
| Patrol Sergeants..... | 3 |
| Desk Sergeants..... | 4 |
| Patrolmen on patrol duty..... | 41 |
| Patrolmen detailed in plain dress..... | 16 |
| Patrolmen detailed in Signal Service. | 4 |
| Patrolmen detailed on ambulance | 4 |
| Patrolmen detailed on permanent post duty | 28 |
| Patrolmen detailed on special duty..... | 9 |
| Patrolman detailed on license | 1 |
| Probationary Patrolmen..... | 14 |
| Lock-up Keepers..... | 4 |
| Constable..... | 1 |
| Total..... | 132 |

This precinct is bounded on the north by Van Buren street, on the east by Lake Michigan, on the south by St. Charles Air Line Railroad, and on the west by the Chicago river.

The area is about seven-eighths square miles.

Population, about 21,000.

SECOND DISTRICT.

THIRD PRECINCT.

Twenty-second Street and Wentworth Avenue.

| | |
|--|----|
| Lieutenant..... | 1 |
| Patrol Sergeants..... | 3 |
| Desk Sergeants..... | 3 |
| Patrolmen on patrol duty..... | 46 |
| Patrolmen detailed in plain dress..... | 6 |
| Patrolmen detailed in Signal Service..... | 4 |
| Patrolmen detailed on permanent post duty..... | 8 |
| Patrolmen detailed on special duty..... | 3 |
| Patrolman detailed on license..... | 1 |
| Probationary Patrolmen..... | 11 |
| Total..... | 86 |

This precinct is bounded on the north by the Chicago river from Halsted street to the St. Charles Air Line Railroad to State street, on the east by State street, on the south by Thirty-first street, and on the west by Halsted street.

The area is about one and one-half square miles.

Population, about 90,000.

SECOND DISTRICT.

FOURTH PRECINCT.

2523 Cottage Grove Avenue.

| | |
|--|----|
| Lieuteuant..... | 1 |
| Patrol Sergeants..... | 3 |
| Desk Sergeants..... | 3 |
| Patrolmen on patrol duty | 54 |
| Patrolmen detailed in plain dress | 6 |
| Patrolmen detailed in Signal Service..... | 4 |
| Patrolmen detailed on permanent post duty..... | 2 |
| Patrolmen specially detailed | 10 |
| Patrolman detailed on license | 1 |
| Probationary Patrolmen..... | 3 |
| <hr/> | |
| Total..... | 87 |

This precinct is bounded on the north by St. Charles Air Line Railroad, on the east by Lake Michigan, on the south by Thirty-first street, and on the west by State street.

The area is about two square miles.

Population, about 70,000.

THIRD DISTRICT.

FIFTH PRECINCT.

144 Thirty-fifth Street.

| | |
|--|----|
| Lieutenant..... | 1 |
| Patrol Sergeants | 3 |
| Desk Sergeants..... | 2 |
| Patrolmen on patrol duty..... | 52 |
| Patrolmen detailed in plain dress..... | 10 |
| Patrolmen detailed in Signal Service..... | 4 |
| Patrolmen detailed on permanent post duty..... | 2 |
| Patrolman detailed on license..... | 1 |
| Patrolmen detailed on special duty..... | 3 |
| Total..... | 78 |

This precinct is bounded on the north by Thirty-first street, on the south by Thirty-ninth street, on the west by Clark street, and on the east by Lake Michigan.

The area is about one and one-quarter square miles.

Population, about 60,000.

THIRD DISTRICT.

SIXTH PRECINCT.

Thirty-fifth Street, near Halsted Street.

| | |
|---|----|
| Captain..... | 1 |
| Lieutenants..... | 2 |
| Patrol Sergeants..... | 3 |
| Desk Sergeants..... | 3 |
| Patrolmen on patrol duty..... | 42 |
| Patrolmen detailed in plain dress..... | 4 |
| Patrolmen detailed in Signal Service..... | 4 |
| Patrolmen detailed on permanent post duty.... | 3 |
| Patrolmen detailed on special duty..... | 2 |
| Patrolman detailed on license..... | 1 |
| Lock-up Keepers..... | 2 |
| Patrolman detailed as Bailiff..... | 1 |
| Total..... | 68 |

This precinct is bounded on the north by Thirty-first street, on the east by Clark street, on the south by Thirty-ninth street, and on the west by the south branch of the Chicago river.

The area is about one and three-eighths square miles.

Population, about 36,000.

THIRD DISTRICT.

SEVENTH PRECINCT.

2913 Deering Street.

| | |
|--|----|
| Lieutenant..... | 1 |
| Patrol Sergeants..... | 2 |
| Desk Sergeants..... | 2 |
| Patrolmen on patrol duty..... | 34 |
| Patrolmen detailed in plain dress..... | 5 |
| Patrolmen detailed in Signal Service..... | 4 |
| Patrolmen detailed on permanent post duty..... | 2 |
| Total..... | 50 |

This precinct is bounded on the north by the south branch of the Chicago river, on the south from Halsted street to the south fork of the south branch of the Chicago river by Thirty-first street and from the south fork of the south branch of the Chicago river west by Thirty-ninth street, on the east from the south branch of the Chicago river to Thirty-first street by Halsted street and from Thirty-first street to Thirty-ninth street by Halsted street and from Thirty-first street to Thirty-ninth street by the south fork of the south branch of the Chicago river, and on the west by Western avenue.

The area is about two square miles.

Population, about 50,000.

THIRD DISTRICT.

EIGHTH PRECINCT.

California Avenue, near Thirty-eighth Street.

| | |
|--|----|
| Lieutenant..... | 1 |
| Patrol Sergeants..... | 2 |
| Desk Sergeants..... | 2 |
| Patrolmen on patrol duty..... | 15 |
| Patrolmen detailed in plain dress..... | 2 |
| Patrolmen detailed in Signal Service..... | 4 |
| Patrolman detailed on permanent post duty..... | 1 |
| Patrolman detailed on license..... | 1 |
| <hr/> | |
| Total... .. | 28 |

The precinct is bounded on the north by the west fork of the south branch of the Chicago river, on the south by Fifty-fifth street, on the east by Western avenue, and on the west by West Forty-eighth street or Hyman avenue from southern boundary to Thirty-ninth street, thence along Thirty-ninth street to Belt Line Railroad, and north on Belt Line Railroad to river.

The area is about eight and one-half square miles.

Population, about 11,700.

THIRD DISTRICT.

NINTH PRECINCT.

(Not Opened.)

FOURTH DISTRICT.

TENTH PRECINCT.

Fifty-third Street and Lake Avenue.

| | |
|---|-----|
| Inspector..... | 1 |
| Captain..... | 1 |
| Lieutenant..... | 1 |
| Patrol Sergeants..... | 4 |
| Desk Sergeants..... | 2 |
| Patrolmen on patrol duty..... | 76 |
| Patrolmen detailed in plain dress..... | 6 |
| Patrolmen detailed in Signal Service..... | 4 |
| Patrolmen detailed on ambulance..... | 4 |
| Patrolmen detailed on special duty..... | 7 |
| Lock-up Keepers..... | 2 |
| Patrolman detailed on license..... | 1 |
| <hr/> | |
| Total..... | 109 |

This precinct is bounded on the north by Thirty-ninth street, on the south by Sixtieth street, on the west by Cottage Grove avenue, and on the east by Lake Michigan.

The area is about two and one-fourth square miles.

Population, about 45,000.

FOURTH DISTRICT.

ELEVENTH PRECINCT.

Fiftieth and State Streets.

| | |
|---|----|
| Lieutenant.... | 1 |
| Patrol Sergeants..... | 3 |
| Desk Sergeants | 3 |
| Patrolmen on patrol duty..... | 63 |
| Patrolmen detailed in plain dress..... | 4 |
| Patrolmen detailed in Signal Service..... | 4 |
| Patrolman detailed on license..... | 1 |
| Lock-up Keepers..... | 2 |
| Probationary patrolmen..... | 13 |
| Total..... | 94 |

This precinct is bounded on the north by Thirty-ninth street, on the east by Cottage Grove avenue, on the south by Sixtieth street to State street, north on State to Fifty-fifth street, west on Fifty-fifth street to the Chicago, Rock Island & Pacific Railroad, and on the west by the Chicago, Rock Island & Pacific Railroad to Thirty-ninth street.

The area is about three and one-half square miles,

Population, about 55,000,

FIFTH DISTRICT.

TWELFTH PRECINCT.

Grace Avenue and Sixty-fourth Street.

| | |
|---|----|
| Captain..... | 1 |
| Lieutenants..... | 2 |
| Patrol Sergeants..... | 2 |
| Desk Sergeants..... | 3 |
| Patrolmen on patrol duty..... | 32 |
| Patrolmen detailed in Signal Service..... | 4 |
| Patrolmen detailed on special duty..... | 10 |
| Patrolman detailed on license..... | 1 |
| Lock-up Keepers..... | 2 |
| Probationary Patrolmen..... | 2 |
| Total..... | 59 |

This precinct is bounded on the north by Sixtieth street, on the south by Seventy-first street, on the west by State street, and on the east by Lake Michigan.

The area is about three and one-eighth square miles.

Population, about 52,500.

FIFTH DISTRICT.

THIRTEENTH PRECINCT.

Dobson Avenue, between Seventy-fifth and Seventy-sixth Streets.

| | |
|--|----|
| Lieutenant..... | 1 |
| Patrol Sergeants..... | 2 |
| Desk Sergeants..... | 2 |
| Patrolmen on patrol duty..... | 31 |
| Patrolmen detailed in plain dress..... | 2 |
| Patrolmen detailed in Signal Service..... | 4 |
| Patrolman detailed on permanent post duty..... | 1 |
| Patrolman detailed on license..... | 1 |
| <hr/> | |
| Total..... | 44 |

This precinct is bounded on the north by Seventy-first street from State street to Jeffery avenue, on the east by Jeffery avenue from Seventy-first street to Eighty-seventh street, thence west on Eighty-seventh street to Stony Island avenue to Ninety-fifth street, on the south by Ninety-fifth street from Stony Island avenue to State street, on the west by State street from Ninety-fifth street to Seventy-first street.

The area is about seven and one-half square miles,

Population, about 37,500.

FIFTH DISTRICT.

FOURTEENTH PRECINCT.

Kensington Avenue and Front Street.

| | |
|--|----|
| Lieutenant..... | 1 |
| Patrol Sergeants..... | 2 |
| Desk Sergeants..... | 2 |
| Patrolmen on patrol duty..... | 19 |
| Patrolmen detailed in plain dress..... | 4 |
| Patrolmen detailed in Signal Service..... | 4 |
| Patrolman detailed on permanent post duty..... | 1 |
| Patrolman detailed on license..... | 1 |
| Probationary patrolman..... | 1 |
| Total..... | 35 |

This precinct is bounded on the north by Ninety-fifth street, on the east by Stony Island avenue, on the south by One Hundred and Thirty-eighth street to Indiana avenue, north on Indiana avenue to the north side of the Calumet river, west on north side of the Calumet river to the Illinois Central Railroad, thence north to One Hundred and Thirtieth street, west on One Hundred and Thirtieth street to Halsted street, north on Halsted street to One Hundred and Twenty-third street, west on One Hundred and Twenty-third street to Ashland avenue, north on Ashland avenue to One Hundred and Fifteenth street, east on One Hundred and Fifteenth street to Peoria street, north on Peoria street to One Hundred and Eleventh street, east on One Hundred and Eleventh street to Halsted street, north on Halsted street to One Hundred and Seventh street, east on One Hundred and Seventh street to State street, north on State street to Ninety-fifth street.

The area is seventeen square miles.

Population, 35,000.

SIXTH DISTRICT.

FIFTEENTH PRECINCT.

Eighty-ninth Street and Exchange Avenue.

| | |
|--|----|
| Captain..... | 1 |
| Lieutenant..... | 1 |
| Patrol Sergeants..... | 3 |
| Desk Sergeants..... | 3 |
| Patrolmen on patrol duty..... | 36 |
| Patrolmen detailed in plain dress..... | 4 |
| Patrolmen detailed in Signal Service..... | 4 |
| Patrolmen detailed on permanent post duty..... | 5 |
| Patrolmen detailed on special duty..... | 3 |
| Patrolman detailed on license..... | 1 |
| Lock up Keepers..... | 2 |
| Probationary patrolmen..... | 5 |
| Total..... | 68 |

This precinct is bounded on the north by Seventy-first street, from Jeffery avenue to Lake Michigan, on the east by Lake Michigan and the Indiana State line, on the south by One Hundred and Thirty eighth street, on the west by Stony Island avenue from One Hundred and Thirty-eighth street to Jeffery avenue, thence north on Jeffery avenue to Seventy-first street.

The area is twenty-one square miles.

Population, 55,000.

SIXTH DISTRICT.

SIXTEENTH PRECINCT.

(Abandoned November 20, 1893.)

SEVENTH DISTRICT.

SEVENTEENTH PRECINCT.

Sixty-fourth Street and Wentworth Avenue.

| | |
|---|-----|
| Captain | 1 |
| Lieutenants..... | 2 |
| Patrol Sergeants..... | 3 |
| Desk Sergeants..... | 3 |
| Patrolmen on patrol duty..... | 63 |
| Patrolmen detailed in plain dress..... | 10 |
| Patrolmen detailed in Signal Service..... | 4 |
| Patrolmen detailed on permanent post duty | 2 |
| Patrolmen detailed on special duty..... | 3 |
| Patrolman detailed on license..... | 1 |
| Lock-up Keeper..... | 1 |
| Probationary Patrolmen..... | 16 |
| <hr/> | |
| Total..... | 109 |

This precinct is bounded on the north by Fifty-fifth street, on the south by Seventy-fifth street, on the east by State street, and on the west by Hyman avenue (city limits).

The area is about sixteen and one-half square miles.

Population, about 82,000.

SEVENTH DISTRICT.

EIGHTEENTH PRECINCT.

Eighty-sixth Street and Vincennes Avenue.

| | |
|---|----|
| Lieutenant..... | 1 |
| Patrol Sergeants..... | 2 |
| Desk Sergeants..... | 2 |
| Patrolmen on patrol duty..... | 18 |
| Patrolmen detailed in plain dress..... | 2 |
| Patrolmen detailed in Signal Service. | 4 |
| Patrolmen detailed on permanent post duty | 4 |
| Patrolman detailed on license | 1 |
| <hr/> | |
| Total..... | 34 |

This precinct is bounded on the north by Seventy-fifth street, on the east by State street, on the south by One Hundred and Seventh street to Western avenue, from Western avenue to Forty-eighth street by Eighty-seventh street, on the west from Seventy-fifth street to Eighty-seventh street by Forty-eighth avenue, and from Eighty-seventh street to One Hundred and Seventh street by Western avenue.

The area is about sixteen and one-half square miles.

Population, 16,000.

EIGHTH DISTRICT.

NINETEENTH PRECINCT.

Matteson and Halsted Streets.

| | |
|--|-----|
| Captain..... | 1 |
| Lieutenants..... | 2 |
| Patrol Sergeants..... | 3 |
| Desk Sergeants..... | 3 |
| Patrolmen on patrol duty..... | 69 |
| Patrolmen detailed in plain dress..... | 8 |
| Patrolmen detailed in Signal Service..... | 4 |
| Patrolmen detailed on ambulance..... | 4 |
| Patrolmen detailed on permanent post duty..... | 4 |
| Patrolmen detailed on special duty..... | 3 |
| Patrolman detailed on license..... | 1 |
| Lock-up Keepers..... | 2 |
| Bailiff..... | 1 |
| Total..... | 105 |

This precinct is bounded on the north by Thirty-ninth street, on the south by Fifty-fifth street, on the east by Clark street, and on the west by Western avenue.

The area is five and three-fourths square miles.

Population, about 85,000.

EIGHTH DISTRICT.

TWENTIETH PRECINCT.

(Not Opened.)

NINTH DISTRICT.

TWENTY-FIRST PRECINCT.

Morgan and Maxwell Streets.

| | |
|--|-----|
| Captain..... | 1 |
| Lieutenants..... | 2 |
| Patrol Sergeants..... | 3 |
| Desk Sergeants..... | 3 |
| Patrolmen on patrol duty..... | 76 |
| Patrolmen detailed in plain dress..... | 8 |
| Patrolmen detailed in Signal Service..... | 4 |
| Patrolmen detailed on permanent post duty..... | 17 |
| Patrolmen detailed on special duty..... | 20 |
| Patrolman detailed on license....., | 2 |
| Lock-up Keepers..... | 3 |
| Bailiffs..... | 2 |
| Court Clerk..... | 1 |
| Poundkeepers..... | 1 |
| Probationary Patrolmen..... | 5 |
| Total..... | 148 |

This precinct is bounded on the north by Harrison street, on the east by the Chicago river, on the south by Sixteenth street, and on the west by Wood street.

The area is about two and one-half square miles.

Population, about 120,000.

NINTH DISTRICT.

TWENTY-SECOND PRECINCT.

Canalport Avenue, near Halsted Street.

| | |
|--|----|
| Lieutenant..... | 1 |
| Patrol Sergeants..... | 2 |
| Desk Sergeants..... | 2 |
| Patrolmen on patrol duty | 28 |
| Patrolmen detailed in plain dress | 2 |
| Patrolmen detailed in Signal Service..... | 4 |
| Patrolmen detailed on permanent post duty..... | 2 |
| Patrolman detailed on license | 1 |
| <hr/> | |
| Total..... | 42 |

This precinct is bounded on the north by Sixteenth street, on the south and east by the south branch of the Chicago river, and on the west by Loomis street.

The area is about one square mile.

Population, about 35,000.

NINTH DISTRICT.

TWENTY-THIRD PRECINCT.

Corner Hinman and Paulina Streets.

| | |
|--|----|
| Lieutenant..... | 1 |
| Patrol Sergeants..... | 2 |
| Desk Sergeants..... | 2 |
| Patrolmen on patrol duty..... | 42 |
| Patrolmen detailed in plain dress..... | 2 |
| Patrolmen detailed in Signal Service..... | 4 |
| Patrolmen detailed on permanent post duty..... | 6 |
| Patrolmen detailed on special duty..... | 2 |
| Patrolman detailed on license..... | 1 |
| Total..... | 62 |

This precinct is bounded on the north by Sixteenth street, on the south by the south branch of the Chicago river, on the east by Loomis street, and on the west by Kedzie avenue.

The area is about three square miles.

Population, about 75,000.

NINTH DISTRICT.

TWENTY-FOURTH PRECINCT.

West Thirteenth Street, near Oakley Avenue.

| | |
|--|----|
| Lieutenant..... | 1 |
| Patrol Sergeants..... | 2 |
| Desk Sergeants..... | 2 |
| Patrolmen on patrol duty..... | 53 |
| Patrolmen detailed in plain dress. | 6 |
| Patrolmen detailed in Signal Service.... | 4 |
| Patrolman detailed on permanent post duty..... | 1 |
| Patrolman detailed on license.... | 1 |
| <hr/> | |
| Total... .. | 70 |

This precinct is bounded on the north by Harrison street, on the east by Wood street, on the south by Sixteenth street, and on the west by Kedzie avenue.

The area is about one and three-fourths square miles.

Population, about 60,000.

NINTH DISTRICT.

TWENTY-FIFTH PRECINCT.

Bonney Avenue, north of Ogden Avenue.

| | |
|--|----|
| Lieutenant..... | 1 |
| Patrol Sergeants. | 2 |
| Desk Sergeants..... | 2 |
| Patrolmen on patrol duty..... | 20 |
| Patrolmen detailed in plain dress..... | 4 |
| Patrolmen detailed in Signal Service..... | 4 |
| Patrolmen detailed on permanent post duty..... | 2 |
| Patrolman detailed on license..... | 1 |
| Probationary Patrolman..... | 1 |
| Total... .. | 37 |

This precinct is bounded on the north by Harrison street, on the south by the south branch of the Chicago river, on the west by Forty-eighth avenue to Twelfth street, thence by the Belt Line Railroad, and on the east by Kedzie avenue.

The area is about five and three-fourths square miles.

Population, about 35,000.

NINTH DISTRICT.

TWENTY-SIXTH PRECINCT.

(Not Opened.)

TENTH DISTRICT.

TWENTY-SEVENTH PRECINCT.

Desplaines Street and Waldo Place.

| | |
|---|-----|
| Inspector..... | 1 |
| Captain..... | 1 |
| Lieutenants..... | 2 |
| Patrol Sergeants..... | 3 |
| Desk Sergeants..... | 3 |
| Patrolmen on patrol duty..... | 68 |
| Patrolmen detailed in Signal Service..... | 4 |
| Patrolmen detailed on ambulance..... | 4 |
| Patrolmen detailed on special duty..... | 30 |
| Patrolman detailed on license..... | 1 |
| Lock-up Keepers..... | 3 |
| Total..... | 120 |

This precinct is bounded on the north by Kinzie street, on the south by Harrison street, on the east by the south branch of the Chicago river, and on the west by Ann street,

The area is one square mile,

Population, 126,000.

TENTH DISTRICT.

TWENTY-EIGHTH PRECINCT.

609 West Lake Street.

| | |
|--|----|
| Lieutenant..... | 1 |
| Patrol Sergeants..... | 3 |
| Desk Sergeants | 2 |
| Patrolmen on patrol duty..... | 69 |
| Patrolmen detailed in plain dress..... | 8 |
| Patrolmen detailed in Signal Service. | 4 |
| Patrolman detailed on license..... | 1 |
| <hr/> | |
| Total..... | 88 |

This precinct is bounded on the north by Kinzie street, on the east by Ann street and Centre avenue, on the south by Harrison street, and on the west by Hoyne avenue.

The area is about one and one-fourth square miles.

Population, about 50,000.

TENTH DISTRICT.

TWENTY-NINTH PRECINCT.

526 Warren Avenue.

| | |
|---|----|
| Lieutenant..... | 1 |
| Patrol Sergeants | 2 |
| Desk Sergeants..... | 2 |
| Patrolmen on patrol duty..... | 74 |
| Patrolmen detailed in plain dress..... | 2 |
| Patrolmen detailed in Signal Service..... | 4 |
| Patrolmen detailed on special duty..... | 6 |
| Total..... | 91 |

This precinct is bounded on the north by Kinzie street, on the south by Harrison street, on the east by Hoyne avenue, and on the west by Homan and Covers avenues.

The area is about one and one-eighth square miles,

Population, about 58,000,

TENTH DISTRICT.

THIRTIETH PRECINCT.

West Lake and Forty-third Streets.

| | |
|---|----|
| Lieutenant..... | 1 |
| Patrol Sergeants..... | 2 |
| Desk Sergeants..... | 2 |
| Patrolmen on patrol duty..... | 37 |
| Patrolmen detailed in plain dress..... | 4 |
| Patrolmen detailed in Signal Service. | 4 |
| Patrolmen detailed on permanent post duty | 2 |
| Patrolmen detailed on special duty..... | 2 |
| Patrolman detailed on license | 1 |
| Total..... | 55 |

This precinct is bounded on the south by Harrison street to West Forty-eighth street, then north on Forty-eighth street to Madison street, thence west on Madison street to west Fifty-second street, thence north on Fifty-second street to Division street, thence east on Division street to Kedzie avenue, thence south on Kedzie avenue to Kinzie street, thence west on Kinzie street to Homan avenue, thence south on Homan avenue to Harrison street.

The area is about four and one-half square miles.

Population, about 25,000.

TENTH DISTRICT.

THIRTY-FIRST PRECINCT.

(Not Opened.)

ELEVENTH DISTRICT.

THIRTY-SECOND PRECINCT.

233 West Chicago Avenue.

| | |
|--|----|
| Captain..... | 1 |
| Lieutenants..... | 2 |
| Patrol Sergeants..... | 3 |
| Desk Sergeants..... | 3 |
| Patrolmen on patrol duty..... | 51 |
| Patrolmen detailed in plain dress..... | 6 |
| Patrolmen detailed in Signal Service..... | 4 |
| Patrolmen detailed on ambulance..... | 4 |
| Patrolmen detailed on permanent post duty..... | 2 |
| Patrolmen detailed on special duty..... | 6 |
| Patrolmen detailed on license..... | 2 |
| Patrolman detailed as Bailiff..... | 1 |
| Lock-up Keepers..... | 3 |
| Probationary Patrolmen..... | 8 |
| Total..... | 96 |

This precinct is bounded on the north by Augusta street, on the east by the north branch of the Chicago river, on the south by Kinzie street, and on the west by Kedzie avenue.

The area is about two and three-fourths square miles.

Population, 100,000.

ELEVENTH DISTRICT.

THIRTY-THIRD PRECINCT.

99 West North Avenue.

| | |
|---|----|
| Lieutenant..... | 1 |
| Patrol Sergeants..... | 2 |
| Desk Sergeants..... | 2 |
| Patrolmen on patrol duty..... | 28 |
| Patrolmen detailed in plain dress..... | 2 |
| Patrolmen detailed in Signal Service..... | 4 |
| Probationary Patrolmen..... | 17 |
| <hr/> | |
| Total..... | 56 |

This precinct is bounded on the north by Armitage avenue, on the east by the north branch of the Chicago river, including the section known as “Goose Island,” on the south by Augusta street and the north branch of the Chicago river, and on the west by Robey street.

The area is one square mile.

Population, 85,000.

ELEVENTH DISTRICT.

THIRTY-FOURTH PRECINCT.

Northwest Corner North and Oakley Avenues.

| | |
|---|----|
| Lieutenant..... | 1 |
| Patrol Sergeants..... | 2 |
| Desk Sergeants..... | 2 |
| Patrolmen on patrol duty..... | 38 |
| Patrolmen detailed in plain dress..... | 2 |
| Patrolmen detailed in Signal Service..... | 4 |
| Patrolman detailed on permanent post duty.... | 1 |
| Patrolman detailed on special duty..... | 1 |
| Patrolman detailed on license..... | 1 |
| Probationary Patrolmen..... | 5 |
| Total..... | 57 |

This precinct is bounded on the north by Armitage avenue, on the east by Robey street, on the west by Fortieth street, and on the south by Division street to Kedzie avenue, thence south to Augusta street, thence on Augusta street to Robey street.

The area is about two and five-eighths square miles.

Population, about 75,000.

FOURTEENTH DISTRICT.

THIRTY-FIFTH PRECINCT.

Milwaukee Avenue and Attrill Street.

| | |
|---|----|
| Captain..... | 1 |
| Lieutenants..... | 2 |
| Patrol Sergeants..... | 2 |
| Desk Sergeants..... | 2 |
| Patrolmen on patrol duty..... | 30 |
| Patrolmen detailed in plain dress..... | 4 |
| Patrolmen detailed in Signal Service..... | 4 |
| Patrolman detailed on license | 1 |
| Probationary patrolmen..... | 6 |
| <hr/> | |
| Total..... | 52 |

This precinct is bounded on the north by Belmont avenue, on the east by the north branch of the Chicago river, on the south by Armitage avenue, and on the west by West Fortieth street.

The area is about two and three-fourths square miles.
Population, about 56,000.

FOURTEENTH DISTRICT.

THIRTY-SIXTH PRECINCT.

Milwaukee Avenue and Irving Park Boulevard.

| | |
|--|----|
| Lieutenant..... | 1 |
| Patrol Sergeants..... | 2 |
| Desk Sergeants..... | 2 |
| Patrolmen on patrol duty .. | 15 |
| Patrolmen detailed in plain dress..... | 2 |
| Patrolmen detailed in Signal Service | 4 |
| Probationary patrolmen..... | 3 |
| <hr/> | |
| Total..... | 29 |

This precinct is bounded on the north and east by Church Road and Kedzie avenue, south to the north branch of the Chicago river, thence along the river to Belmont avenue, west on Belmont avenue to Washington avenue, north to Irving Park boulevard, east to Austin avenue, north to South avenue, west to the west line of the east quarter of section one, north on said line to Center avenue, west to Winter street, north to North avenue, east to west line of east quarter of section thirty-six to Fulton avenue, east to the west line of Lindstrom and Malmsted's subdivision, thence north to north line of said subdivision, east on north line to east line of said subdivision, south to Fulton avenue, east on Fulton avenue to Milwaukee avenue, thence in a southeasterly direction to Church Road.

The area is twenty-two and one-half square miles.

Population, 36,000.

FOURTEENTH DISTRICT.

THIRTY-SEVENTH PRECINCT.

Grand and Linden Avenues.

| | |
|--|----|
| Lieutenant..... | 1 |
| Patrol Sergeants..... | 2 |
| Desk Sergeants | 2 |
| Patrolmen on patrol duty..... | 9 |
| Patrolman detailed in plain dress..... | 1 |
| Probationary patrolman..... | 1 |
| Total..... | 16 |

This precinct is bounded on the north by Belmont avenue, on the east by West Fortieth street south to Division street, west to North Fifty-second avenue, north to North avenue, west to Washington avenue, north to Belmont avenue.

The area is about nine square miles.

Population, about 9,000.

TWELFTH DISTRICT.

THIRTY-EIGHTH PRECINCT.

240 to 244 East Chicago Avenue.

| | |
|--|-----|
| Inspector..... | 1 |
| Captain..... | 1 |
| Lieutenants..... | 2 |
| Patrol Sergeants..... | 3 |
| Desk Sergeants..... | 4 |
| Patrolmen on patrol duty..... | 46 |
| Patrolmen detailed in plain dress..... | 8 |
| Patrolmen detailed in Signal Service..... | 4 |
| Patrolmen detailed on ambulance..... | 4 |
| Patrolmen detailed on permanent post duty..... | 5 |
| Patrolmen detailed on license..... | 2 |
| Lock-up Keepers..... | 3 |
| Patrolman detailed as Bailiff..... | 1 |
| Probationary patrolmen..... | 27 |
| <hr/> | |
| Total..... | 111 |

This precinct is bounded on the north by Division street, on the east by Lake Michigan, on the south by the Chicago river to the north branch canal, thence along the north branch canal to Division street.

The area is about one and one-eighth square miles.

Population, about 65,000.

TWELFTH DISTRICT.

THIRTY-NINTH PRECINCT.

North Avenue and Larrabee Street.

| | |
|---|----|
| Lieutenant..... | 1 |
| Patrol Sergeants..... | 2 |
| Desk Sergeants..... | 2 |
| Patrolmen on patrol duty..... | 38 |
| Patrolmen detailed in plain dress..... | 2 |
| Patrolmen detailed in Signal Service..... | 4 |
| Probationary Patrolmen..... | 3 |
| <hr/> | |
| Total..... | 52 |

This precinct is bounded on the north by Willow and Menominee streets, on the east by Lake Michigan, on the south by Division street, and on the west by the north branch canal.

The area is about one and three-twentieths square miles.

Population, about 75,000.

TWELFTH DISTRICT.

FORTIETH PRECINCT.

958 North Halsted Street.

| | |
|---|----|
| Lieutenant..... | 1 |
| Patrol Sergeants..... | 2 |
| Desk Sergeants..... | 2 |
| Patrolmen on patrol duty..... | 26 |
| Patrolmen detailed in plain dress..... | 4 |
| Patrolmen detailed in Signal Service..... | 4 |
| Probationary patrolmen..... | 12 |
| Total..... | 51 |

This precinct is bounded on the north by Fullerton avenue, on the east by Lake Michigan, on the south by Willow and Menominee streets, and on the west by the north branch of the Chicago river.

The area is about one and one-tenth square miles.

Population, about 65,000.

THIRTEENTH DISTRICT.

FORTY-FIRST PRECINCT.

687 Sheffield Avenue.

| | |
|---|----|
| Captain..... | 1 |
| Lieutenants..... | 2 |
| Patrol Sergeants..... | 3 |
| Desk Sergeants..... | 2 |
| Patrolmen on patrol duty..... | 28 |
| Patrolmen detailed in plain dress..... | 4 |
| Patrolmen detailed in Signal Service..... | 4 |
| Patrolman detailed on license..... | 1 |
| Patrolman detailed as Bailiff..... | 1 |
| Probationary patrolmen..... | 13 |
| <hr/> | |
| Total..... | 59 |

This precinct is bounded on the north by Belmont avenue, on the south by Fullerton avenue, on the east by Lake Michigan, and on the west by the north branch of the Chicago river.

The area is about three and three-fourths square miles.

Population, about 53,000.

THIRTEENTH DISTRICT.

FORTY-SECOND PRECINCT.

Addison and Halsted Streets.

| | |
|---|----|
| Lieutenant..... | 1 |
| Patrol Sergeants..... | 2 |
| Desk Sergeants..... | 2 |
| Patrolmen on patrol duty | 19 |
| Patrolmen detailed in plain dress..... | 2 |
| Patrolmen detailed in Signal Service..... | 4 |
| Probationary Patrolman..... | 1 |
| <hr/> | |
| Total... .. | 31 |

The precinct is bounded on the north by Lawrence avenue, on the east by Lake Michigan, on the south by Belmont avenue, and on the west by the north branch of the Chicago river.

The area is about five and one-half square miles.

Population, about 45,000.

THIRTEENTH DISTRICT.

FORTY-THIRD PRECINCT.

Palmer and Foster Avenues.

| | |
|---|----|
| Lieutenant..... | 1 |
| Patrol Sergeants..... | 2 |
| Desk Sergeants..... | 2 |
| Patrolmen on patrol duty..... | 17 |
| Patrolman detailed in plain dress.... | 1 |
| Patrolmen detailed in Signal Service..... | 4 |
| Patrolman detailed on license..... | 1 |
| Probationary patrolman..... | 1 |
| Total | 29 |

This precinct is bounded on the north by Homan avenue, on the south by Lawrence avenue, on the east by Lake Michigan, and on the west by the north branch of the Chicago river to Kedzie avenue, thence north to Homan avenue.

The area is about ten square miles.

Population, about 16,000.

THIRTEENTH DISTRICT.

FORTY-FOURTH PRECINCT.

North Clark Street and Jackson Avenue.

| | |
|-------------------------------|----|
| Lieutenant..... | 1 |
| Patrol Sergeants..... | 2 |
| Desk Sergeants..... | 2 |
| Patrolmen on patrol duty..... | 8 |
| <hr/> | |
| Total | 13 |

This precinct is bounded on the north by the City of Evanston, on the south by Homan avenue, on the east by Lake Michigan, and on the west by Niles Centre.

The area is about four square miles.

Population, about 8,000.

RECAPITU

| | General Superintendent. | Assistant Superintendent. | Secretary. | Inspectors. | Superintendent's Private Secretary. | Captains. | Lieutenants. | Lieutenants of Detectives. | Patrol Sergeants. | Desk Sergeants. | Sergeants of Detectives. | Chief Clerk of Detectives. | Detective Sergeants. | Custodian. | Clerks. | Lock-up Keepers. | Patrolmen on Permanent Post Duty. | Patrolmen on Patrol Duty. |
|----------------|--------------------------|---------------------------|------------|-------------|--|-----------|--------------|----------------------------|-------------------|-----------------|--------------------------|----------------------------|----------------------|------------|---------|------------------|--------------------------------------|---------------------------|
| Central Stat'n | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 2 | | 9 | 2 | 1 | 51 | 1 | 3 | | | |
| 1st Precinct | | | | | | 1 | 3 | | | 3 | | | | | | | 229 | 54 |
| 2nd " | | | | | | 1 | 3 | | | 4 | | | | | | 4 | 28 | 41 |
| 3rd " | | | | | | | 1 | | | 3 | | | | | | | 8 | 46 |
| 4th " | | | | | | | 1 | | | 3 | | | | | | | 2 | 54 |
| 5th " | | | | | | | 1 | | | 3 | | | | | | | 2 | 52 |
| 6th " | | | | | | 1 | 2 | | | 3 | | | | | | 2 | 3 | 42 |
| 7th " | | | | | | | 1 | | | 3 | | | | | | | 1 | 34 |
| 8th " | | | | | | | 1 | | | 3 | | | | | | | 1 | 15 |
| 9th " | NOT OPENED. | | | | | | | | | | | | | | | | | |
| 10th " | | | | 1 | | 1 | 1 | | 4 | 2 | | | | | | 2 | | 76 |
| 11th " | | | | | | | 1 | | 2 | 3 | | | | | | 3 | | 63 |
| 12th " | | | | | | 1 | 2 | | 2 | 3 | | | | | | 3 | | 32 |
| 13th " | | | | | | | 1 | | 2 | 3 | | | | | | | 1 | 31 |
| 14th " | | | | | | | 1 | | 3 | 3 | | | | | | 1 | 1 | 19 |
| 15th " | | | | | | 1 | 2 | | 3 | 3 | | | | | | 2 | 5 | 36 |
| 16th " | ABANDONED NOV. 20, 1893. | | | | | | | | | | | | | | | | | |
| 17th " | | | | | | 1 | 2 | | 3 | 3 | | | | | | 1 | 2 | 63 |
| 18th " | | | | | | 1 | 1 | | 2 | 3 | | | | | | | 4 | 18 |
| 19th " | | | | | | 1 | 2 | | 3 | 3 | | | | | | 2 | 4 | 69 |
| 20th " | NOT OPENED. | | | | | | | | | | | | | | | | | |
| 21st " | | | | | | 1 | 2 | | 3 | 3 | | | | | | 3 | 17 | 76 |
| 22nd " | | | | | | | 1 | | 3 | 3 | | | | | | | 2 | 28 |
| 23rd " | | | | | | | 1 | | 3 | 3 | | | | | | | 6 | 42 |
| 24th " | | | | | | | 1 | | 3 | 3 | | | | | | | 1 | 53 |
| 25th " | | | | | | | 1 | | 3 | 3 | | | | | | | 2 | 20 |
| 26th " | NOT OPENED. | | | | | | | | | | | | | | | | | |
| 27th " | | | | 1 | | 1 | 2 | | 3 | 3 | | | | | | | 3 | 68 |
| 28th " | | | | | | | 1 | | 3 | 3 | | | | | | | | 69 |
| 29th " | | | | | | | 1 | | 3 | 3 | | | | | | | | 74 |
| 30th " | | | | | | | 1 | | 3 | 3 | | | | | | | 2 | 37 |
| 31st " | NOT OPENED. | | | | | | | | | | | | | | | | | |
| 32nd " | | | | | | 1 | 2 | | 3 | 3 | | | | | | 3 | 2 | 51 |
| 33rd " | | | | | | | 1 | | 3 | 3 | | | | | | | | 28 |
| 34th " | | | | | | | 1 | | 3 | 3 | | | | | | | 1 | 38 |
| 35th " | | | | | | 1 | 2 | | 3 | 3 | | | | | | | | 30 |
| 36th " | | | | | | | 1 | | 3 | 3 | | | | | | | | 15 |
| 37th " | | | | | | | 1 | | 3 | 3 | | | | | | | | 9 |
| 38th " | | | | 1 | | 1 | 2 | | 4 | 4 | | | | | | 3 | 5 | 46 |
| 39th " | | | | | | | 1 | | 3 | 3 | | | | | | | | 38 |
| 40th " | | | | | | | 1 | | 3 | 3 | | | | | | | | 26 |
| 41st " | | | | | | 1 | 2 | | 3 | 3 | | | | | | | | 28 |
| 42nd " | | | | | | | 1 | | 3 | 3 | | | | | | | | 19 |
| 43rd " | | | | | | | 1 | | 3 | 3 | | | | | | | | 17 |
| 44th " | | | | | | | 1 | | 3 | 3 | | | | | | | | 8 |
| Total..... | 1 | 1 | 1 | 4 | 1 | 15 | 56 | 2 | 98 | 163 | 2 | 1 | 51 | 1 | 3 | 26 | 333 | 1565 |

LATION.

| Patrolmen Detailed in Plain Dress. | Patrolmen Detailed in Signal Service. | Patrolmen Detailed in Ambulance Service. | Patrolmen Detailed on License. | Vehicle Inspectors. | Patrolmen. Pawnshop Inspectors. | Patrolmen Specially Detailed. | Patrolmen Detailed as Bailiffs. | Poundkeeper. | Assistant Photographers. | Veterinary Surgeon. | Ass't Veterinary Surgeon. | Printer. | Assistant Printer. | Stenographers. | Superintendent Bureau of Identification. | Patrolman Detailed as Court Clerk. | Probationary Patrolmen. | Foreman of Construction. | Feed Inspector. | Total. |
|---------------------------------------|--|---|-----------------------------------|---------------------|------------------------------------|----------------------------------|------------------------------------|--------------|--------------------------|---------------------|---------------------------|----------|--------------------|----------------|---|---------------------------------------|-------------------------|--------------------------|-----------------|--------|
| 4 | 2 | | 1 | 4 | 2 | 40 | | | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 132 |
| 16 | 4 | 4 | 1 | | | 37 | | | | | | | | | | | 14 | | | 349 |
| 6 | 4 | | 1 | | | 10 | | | | | | | | | | | 11 | | | 132 |
| 6 | 4 | | 1 | | | 3 | | | | | | | | | | | 3 | | | 86 |
| 10 | 4 | | 1 | | | 10 | | | | | | | | | | | | | | 87 |
| 4 | 4 | | 1 | | | 3 | | | | | | | | | | | | | | 78 |
| 4 | 4 | | 1 | | | 12 | 1 | | | | | | | | | | | | | 68 |
| 5 | 4 | | | | | | | | | | | | | | | | | | | 50 |
| 2 | 4 | | 1 | | | | | | | | | | | | | | | | | 28 |
| 6 | 4 | 4 | 1 | | | 7 | | | | | | | | | | | | | | 109 |
| 4 | 4 | | 1 | | | | | | | | | | | | | | 13 | | | 94 |
| | 4 | | 1 | | | 10 | | | | | | | | | | | 2 | | | 59 |
| 2 | 4 | | 1 | | | | | | | | | | | | | | | | | 44 |
| 4 | 4 | | 1 | | | | | | | | | | | | | | 1 | | | 35 |
| 4 | 4 | | 1 | | | 3 | | | | | | | | | | | 5 | | | 69 |
| 10 | 4 | | 1 | | | 3 | | | | | | | | | | | 16 | | | 109 |
| 2 | 4 | | 1 | | | | | | | | | | | | | | | | | 34 |
| 8 | 4 | 4 | 1 | | | 3 | 1 | | | | | | | | | | | | | 105 |
| 8 | 4 | | 2 | | | 20 | 2 | 1 | | | | | | | | | 5 | | | 148 |
| 2 | 4 | | 1 | | | | | | | | | | | | | | | | | 42 |
| 2 | 4 | | 1 | | | 2 | | | | | | | | | | | | | | 62 |
| 6 | 4 | | 1 | | | | | | | | | | | | | | | | | 70 |
| 4 | 4 | | 1 | | | | | | | | | | | | | | 1 | | | 37 |
| | 4 | 4 | 1 | | | 30 | | | | | | | | | | | | | | 120 |
| 8 | 4 | | 1 | | | | | | | | | | | | | | | | | 88 |
| 2 | 4 | | | | | 6 | | | | | | | | | | | | | | 91 |
| 4 | 4 | | 1 | | | 2 | | | | | | | | | | | | | | 55 |
| 6 | 4 | 4 | 2 | | | 6 | 1 | | | | | | | | | | 2 | | | 96 |
| 2 | 4 | | | | | | | | | | | | | | | | 17 | | | 56 |
| 2 | 4 | | 1 | | | 1 | | | | | | | | | | | 5 | | | 57 |
| 4 | 4 | | 1 | | | | | | | | | | | | | | 6 | | | 52 |
| 2 | 4 | | | | | | | | | | | | | | | | 3 | | | 29 |
| 1 | 4 | | | | | | | | | | | | | | | | 1 | | | 16 |
| 8 | 4 | 4 | 2 | | | | 1 | | | | | | | | | | 27 | | | 111 |
| 2 | 4 | | | | | | | | | | | | | | | | 3 | | | 52 |
| 4 | 4 | | 1 | | | | | | | | | | | | | | 12 | | | 51 |
| 4 | 4 | | | | | | 1 | | | | | | | | | | 13 | | | 59 |
| 2 | 4 | | 1 | | | | | | | | | | | | | | 1 | | | 31 |
| 1 | 4 | | | | | | | | | | | | | | | | 1 | | | 29 |
| | | | | | | | | | | | | | | | | | | | | 13 |
| 167 | 152 | 24 | 33 | 4 | 2 | 198 | 7 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 169 | 1 | 1 | 3,033 |

COMMANDING OFFICERS.

| | | | |
|-----------------------------------|---|---|----------------|
| General Superintendent, | - | - | J. J. BADENOCH |
| Room 104, City Hall. | | | |
| Assistant General Superintendent, | - | | ALEX S. ROSS |
| Room 8, City Hall. | | | |
| Secretary of Department, | - | - | A. F. CAMPBELL |
| Room 10, City Hall. | | | |

DIVISIONS AND INSPECTORS IN CHARGE.

The First Division includes the Central Station, First, Second and Third Districts, and is commanded by Inspector John E. Fitzpatrick. Room 1, City Hall.

The Second Division includes the Fourth, Fifth, Sixth, Seventh and Eighth Districts, and is commanded by Inspector Nicholas Hunt. Office at Fifty-third street and Lake avenue.

The Third Division includes the Ninth and Tenth Districts, and is commanded by Inspector John D. Shea. Office at Desplaines street and Waldo place.

The Fourth Division includes the Eleventh, Twelfth, Thirteenth and Fourteenth Districts, and is commanded by Inspector M. J. Shaack. Office at East Chicago avenue Station.

DISTRICTS AND CAPTAINS IN CHARGE.

Detective Department, Room 5, City Hall, commanded by Captain Horace G. Elliott.

The First District includes the First Precinct, and is commanded by Captain Albert G. Dutton. Headquarters at First Precinct Station, Monroe street and Michigan avenue.

The Second District includes the Second, Third and Fourth Precincts, and is commanded by Captain Charles G. Koch, with headquarters at Second Precinct Station, Harrison street and Pacific avenue.

The Third District includes the Fifth, Sixth, Seventh, Eighth and Ninth Precincts, and is commanded by Captain James Madden, with headquarters at Sixth Precinct Station, Thirty-fifth street, near Halsted.

The Fourth District includes the Tenth and Eleventh Precincts, and is commanded by Captain Charles E. Aldrich, with headquarters at Fifty-third street and Lake avenue.

The Fifth District includes the Twelfth, Thirteenth and Fourteenth Precincts, and is commanded by Captain George M. Shippy, with headquarters at Twelfth Precinct Station, 321 Sixty-third street.

The Sixth District includes the Fifteenth and Sixteenth Precincts, and is commanded by Captain Adam Fyfe, with headquarters at Fifteenth Precinct Station, Eighty-ninth and Exchange avenue.

The Seventh District includes the Seventeenth and Eighteenth Precincts, and is commanded by Captain Patrick J. Gibbons, with headquarters at Sixty-fourth street and Wentworth avenue.

The Eighth District is co-extensive with the Nineteenth Precinct, and is commanded by Captain Francis O'Neill, with headquarters at Nineteenth Precinct Station, Matteson and Halsted streets.

The Ninth District includes the Twenty-first, Twenty-second, Twenty-third, Twenty-fourth and Twenty-fifth Precincts, and is commanded by Captain John Wheeler, with headquarters at Morgan and Maxwell streets.

The Tenth District includes the Twenty-seventh, Twenty-eighth, Twenty-ninth and Thirtieth Precincts, and is commanded by Captain John E. Mahoney, with headquarters at Twenty-seventh Precinct Station, Desplaines street and Waldo place.

The Eleventh District includes the Thirty-second, Thirty-third and Thirty-fourth Precincts, and is commanded by Captain Charles C. Larsen, with headquarters at Thirty-second Precinct Station, 233 W. Chicago avenue.

The Twelfth District includes the Thirty-eighth, Thirty-ninth and Fortieth Precincts, and is commanded by Captain Francis P. Barcal, with headquarters at Thirty-eighth Precinct Station, East Chicago avenue, near Clark street.

The Thirteenth District includes the Forty-first, Forty-second, Forty-third and Forty-fourth Precincts, and is commanded by Captain Herman F. Schuettler, with headquarters at Forty-first Precinct Station, Sheffield avenue near Diversey street.

The Fourteenth District includes the Thirty-fifth, Thirty-sixth and Thirty-seventh Precincts, and is commanded by Captain Bernard P. Baer, with headquarters at Thirty-fifth Precinct Station, Milwaukee avenue and Attrill street.

INFORMATION IN REGARD TO PERSONS ARRESTED.
OCCUPATIONS.

| | | | |
|----------------------|-------|----------------------|-----|
| Actors..... | 68 | Constables | 84 |
| Actresses | 7 | Contractors | 192 |
| Agents..... | 798 | Cooks..... | 491 |
| Architects | 17 | Coopers | 117 |
| Artists | 61 | Coppersmiths | 7 |
| Attorneys..... | 175 | Coremakers..... | 18 |
| Auctioneers..... | 7 | Cornicemakers | 25 |
| Bakers..... | 355 | Curriers..... | 18 |
| Bankers..... | 17 | Custodians..... | 1 |
| Barbers..... | 571 | Cutlers..... | 1 |
| Bartenders..... | 847 | Dentists | 37 |
| Basketmakers..... | 5 | Detectives..... | 2 |
| Bell Boys..... | 2 | Distillers..... | 4 |
| Bill Posters..... | 82 | Draughtsmen..... | 5 |
| Blacksmiths..... | 458 | Dressmakers..... | 25 |
| Boilermakers..... | 167 | Drovers..... | 6 |
| Bookbinders..... | 58 | Druggists..... | 78 |
| Bookkeepers..... | 227 | Dyers | 13 |
| Bootblacks..... | 64 | Editors..... | 6 |
| Boxmakers..... | 62 | Electricians..... | 110 |
| Brassfinishers..... | 41 | Engineers..... | 329 |
| Brewers..... | 43 | Engravers | 25 |
| Bricklayers..... | 487 | Errandboys..... | 17 |
| Bridgebuilders | 21 | Expressmen..... | 352 |
| Bridgetenders..... | 8 | Farmers..... | 127 |
| Brokers | 86 | Finishers..... | 62 |
| Broommakers..... | 15 | Firemen | 254 |
| Brushmakers | 9 | Fishermen | 38 |
| Butchers..... | 799 | Florists..... | 20 |
| Cabdrivers..... | 123 | Foremen..... | 35 |
| Cabinetmakers..... | 80 | Fortunetellers | 6 |
| Canvassers..... | 30 | Furriers..... | 8 |
| Capitalists..... | 2 | Gamblers..... | 496 |
| Carpenters..... | 1,283 | Gardeners..... | 46 |
| Carpetlayers | 5 | Gasfitters..... | 51 |
| Carriagemakers..... | 39 | Gilders..... | 22 |
| Carvers..... | 29 | Glassblowers..... | 25 |
| Caulkers | 11 | Glaziers | 8 |
| Chemist..... | 5 | Grocers..... | 237 |
| Clergymen..... | 5 | Gunsmiths..... | 2 |
| Cigarmakers | 358 | Hackmen..... | 58 |
| Clerks..... | 2,673 | Harnessmakers..... | 79 |
| Coachmen..... | 147 | Hatters..... | 27 |
| Collectors..... | 66 | Horseshoers | 35 |
| Conductors..... | 40 | Hostlers..... | 229 |
| Confectioners..... | 43 | Hotelkeepers..... | 139 |

| | | | |
|----------------------|--------|--------------------------|-------|
| Housekeepers..... | 4,314 | Polishers..... | 78 |
| Housemovers..... | 13 | Porters..... | 709 |
| Inspectors..... | 20 | Potters..... | 5 |
| Ironworkers..... | 31 | Printers..... | 690 |
| Janitors..... | 239 | Prostitutes..... | 2,349 |
| Jewelers..... | 59 | Publishers..... | 2 |
| Jockeys..... | 3 | Ragpickers..... | 8 |
| Junk Dealers..... | 122 | Railroad employes..... | 697 |
| Laborers..... | 16,462 | Reedworkers..... | 2 |
| Lamplighters..... | 1 | Reporters..... | 29 |
| Lathers..... | 116 | Restaurant keepers..... | 27 |
| Laundresses..... | 35 | Roofers..... | 110 |
| Laundrymen..... | 82 | Runners..... | 13 |
| Lettercarriers..... | 11 | Sailors..... | 334 |
| Linemen..... | 5 | Salesmen..... | 158 |
| Lithographers..... | 27 | Saloonkeepers..... | 2,601 |
| Liverykeepers..... | 55 | Sawyers..... | 11 |
| Locksmiths..... | 14 | Scavengers..... | 18 |
| Manufacturers..... | 22 | Seamstresses..... | 22 |
| Machinists..... | 967 | Secondhandlers..... | 48 |
| Managers..... | 22 | Servants..... | 276 |
| Marblecutters..... | 47 | Sewer Builders..... | 19 |
| Masons..... | 74 | Shoemakers..... | 353 |
| Merchants..... | 1,040 | Showmen..... | 2 |
| Merchant Police..... | 16 | Signhangers..... | 3 |
| Messengers..... | 22 | Silversmiths..... | 1 |
| Midwife..... | 12 | Slaters..... | 4 |
| Milkmen..... | 107 | Soapmakers..... | 3 |
| Millers..... | 15 | Soldiers..... | 15 |
| Milliners..... | 12 | Steamfitters..... | 196 |
| Millwrights..... | 4 | Stenographers..... | 29 |
| Miners..... | 13 | Stereotypers..... | 2 |
| Molders..... | 465 | Stockdealers..... | 33 |
| Musicians..... | 139 | Stonecutters..... | 121 |
| Nailmakers..... | 5 | Stove Mounters..... | 1 |
| Newsboys..... | 184 | Students..... | 121 |
| Notary Public..... | 1 | Surveyors..... | 2 |
| No Occupation..... | 38,131 | Tailors..... | 664 |
| Nurse..... | 3 | Tanners..... | 50 |
| Organgrinders..... | 4 | Teachers..... | 16 |
| Opticians..... | 7 | Teamsters..... | 3,074 |
| Packers..... | 10 | Telegraph operators..... | 89 |
| Painters..... | 1,278 | Tinsmiths..... | 249 |
| Papercarriers..... | 8 | Trunk makers..... | 3 |
| Paperhangers..... | 180 | Tuckpointers..... | 5 |
| Patternmakers..... | 15 | Turners..... | 32 |
| Pawnbrokers..... | 24 | Undertakers..... | 43 |
| Pavers..... | 2 | Upholsterers..... | 118 |
| Peddlers..... | 2,395 | U. S. Marshals..... | 1 |
| Photographers..... | 32 | Veterinaries..... | 1 |
| Physicians..... | 88 | Wagonmakers..... | 20 |
| Pianomakers..... | 21 | Waiters..... | 743 |
| Pilots..... | 3 | Watchmakers..... | 20 |
| Platers..... | 7 | Watchmen..... | 178 |
| Plasterers..... | 250 | Weavers..... | 29 |
| Plumbers..... | 700 | Whitewashers..... | 4 |
| Policemen..... | 16 | Wheelwrights..... | 1 |

CHARGES AGAINST PERSONS ARRESTED.

| | |
|--|--------|
| Abandonment..... | 283 |
| Accessory to Murder..... | 14 |
| Attempted Murder..... | 8 |
| Abduction..... | 38 |
| Abortion..... | 5 |
| Accessory to Assault..... | 9 |
| Accessory to Burglary..... | 105 |
| Accessory to Larceny..... | 344 |
| Accessory to Robbery..... | 123 |
| Adultery..... | 135 |
| Arson..... | 32 |
| Assault..... | 4,923 |
| Assaulting an Officer..... | 2 |
| Assault with a deadly weapon..... | 606 |
| Assault with intent to commit rape..... | 110 |
| Assault with intent to rob..... | 149 |
| Assault with intent to kill..... | 607 |
| Assault with intent to do bodily injury..... | 571 |
| Attempt to commit larceny..... | 31 |
| Attempt to commit burglary..... | 192 |
| Bastardy..... | 138 |
| Bigamy..... | 40 |
| Burglary..... | 1,947 |
| Carrying concealed weapons..... | 1,084 |
| Cock fighting..... | 69 |
| Conspiracy..... | 23 |
| Contempt of court..... | 16 |
| Counterfeiting..... | 2 |
| Criminal carelessness..... | 19 |
| Crime against nature..... | 13 |
| Cruelty to animals..... | 74 |
| Cruelty to children..... | 22 |
| Destitute..... | 3 |
| Disorderly..... | 50,641 |
| Distributing obscene literature..... | 1 |
| Dog-fighting..... | 2 |
| Doing business without a license..... | 369 |
| Embezzlement..... | 150 |
| Exposing person..... | 135 |
| Extortion by threat..... | 1 |
| Fast driving..... | 85 |
| Forgery..... | 122 |
| Fugitives from justice..... | 30 |
| Having burglar's tools..... | 15 |
| Having gaming devices..... | 4 |

CHARGES—Continued.

| | |
|--|-------|
| Horse stealing..... | 6 |
| Illegal voting..... | 19 |
| Incest..... | 7 |
| Inmates of assignation house..... | 92 |
| Inmates of disorderly house..... | 205 |
| Inmates of gaming house..... | 25,35 |
| Inmates of house of ill fame..... | 5,547 |
| Inmates of opium den..... | 528 |
| Interfering with officer in discharge of duty..... | 48 |
| Intimidation..... | 15 |
| Keeping assignation house..... | 15 |
| Keeping a disorderly house..... | 30 |
| Keeping a gaming house..... | 310 |
| Keeping a house of ill fame..... | 241 |
| Kidnapping..... | 14 |
| Larceny..... | 6,780 |
| Larceny as bailee..... | 459 |
| Leaving team unhitched..... | 2 |
| Lounging on street corners..... | 194 |
| Malicious mischief..... | 602 |
| Manslaughter..... | 6 |
| Mayhem..... | 49 |
| Murder..... | 29 |
| Obstructing street cars..... | 62 |
| Obtaining goods under false pretenses..... | 101 |
| Obtaining money under false pretenses..... | 550 |
| Passing counterfeit money..... | 11 |
| Peddling without license..... | 323 |
| Perjury..... | 43 |
| Rape..... | 106 |
| Receiving stolen property..... | 401 |
| Representing himself an officer..... | 68 |
| Resisting an officer..... | 911 |
| Riot..... | 40 |
| Robbery..... | 1,083 |
| Selling liquor to drunkards..... | 19 |
| Selling liquor to minors..... | 21 |
| Shooting inside of city limits..... | 265 |
| Swindling..... | 202 |
| Threats..... | 1,699 |
| Vagrancy..... | 1,988 |
| Violation of ordinance concerning bathing..... | 80 |
| Violation begging ordinance..... | 4 |
| Violation bridge ordinance..... | 7 |

CHARGES—Continued.

| | |
|---|-------|
| Violation building ordinance..... | 50 |
| Violation depot ordinance..... | 2 |
| Violation dog ordinance..... | 731 |
| Violation express ordinance..... | 41 |
| Violation hack ordinance..... | 36 |
| Violation health ordinance..... | 81 |
| Violation junk dealer's ordinance..... | 50 |
| Violation park ordinance..... | 575 |
| Violation pawnbroker's ordinance..... | 15 |
| Violation railway ordinance..... | 1,023 |
| Violation saloon ordinance..... | 1,359 |
| Violation sidewalk ordinance..... | 157 |
| Violation street ordinance..... | 122 |
| Violation telegraph ordinance..... | 1 |
| Violation vehicle ordinance..... | 66 |
| Violation weights and measures ordinance..... | 365 |
| Violation of different other ordinances..... | 3,164 |

RECAPITULATION.

| | | |
|------------------------------------|--------------|--------|
| Total Number of Arrests... 96,847 | Females..... | 21,881 |
| Total Amount of Fines....\$300,319 | Married..... | 26,484 |
| Males..... 74,966 | Single..... | 70,363 |

AGES.

| | |
|-----------------------------------|--------|
| Under ten years of age..... | 326 |
| From ten to twenty years..... | 16,695 |
| From twenty to thirty years..... | 43,690 |
| From thirty to forty years..... | 22,469 |
| From forty to fifty years..... | 9,284 |
| From fifty to sixty years..... | 3,270 |
| From sixty to seventy years..... | 948 |
| From seventy to eighty years..... | 152 |
| From eighty to ninety years..... | 12 |
| Over ninety years..... | 1 |

HOW DISPOSED OF.

| | |
|---|--------|
| Number discharged in Police Court..... | 59,365 |
| Number sent to County Agent..... | 11 |
| Number sent to Catholic Asylum..... | 16 |
| Number bound over to keep the peace | 2,626 |
| Number fined in Police Court..... | 24,869 |
| Number sent to House of Good Shepherd..... | 16 |
| Number held on Criminal charges..... | 4,567 |
| Number changes of Venue to private Justices.... | 5,333 |
| Number sent to Washingtonian Home..... | 3 |
| Number sent to Martha Washington Home..... | 6 |
| Number sent to Erring Woman's Refuge | 8 |
| Number sent to County Physician..... | 23 |
| Number sent to County Hospital..... | 1 |
| Number Married in Court..... | 3 |

NATIONALITIES.

| | | | |
|--------------------------|--------|------------------|-------|
| Algerian..... | 18 | Hollanders..... | 161 |
| American... .. | 56,264 | Hungarian | 173 |
| American, colored | 9,490 | Indians..... | 29 |
| Arabian..... | 39 | Italians | 1,540 |
| Australian..... | 22 | Irish | 5,709 |
| Austrian..... | 411 | Japanese | 4 |
| Bohemian..... | 1,060 | Mexican..... | 18 |
| Belgians..... | 60 | Norwegian..... | 826 |
| Canadians..... | 1,130 | Polanders..... | 2,998 |
| Chinese..... | 714 | Portugese..... | 17 |
| Cubans..... | 5 | Russians..... | 1,680 |
| Danes..... | 343 | Swedes | 1,831 |
| East Indian..... | 1 | Scotch..... | 479 |
| English..... | 1,099 | Spanish..... | 26 |
| Finlanders..... | 15 | Swiss..... | 78 |
| French..... | 990 | Turks | 12 |
| Germans..... | 8,957 | Welsh..... | 55 |
| Greek | 593 | | |

NUMBER OF ARRESTS AND AMOUNT OF FINES IMPOSED
EACH MONTH DURING 1896.

| MONTHS. | TOTAL MONTHLY ARRESTS. | TOTAL FINES IN COURT. |
|----------------|------------------------------|--------------------------|
| January..... | 6,509 | \$24,835 |
| February..... | 5,599 | 19,020 |
| March..... | 6,421 | 18,505 |
| April..... | 7,859 | 19,588 |
| May... .. | 8,403 | 25,714 |
| June..... | 9,234 | 30,693 |
| July..... | 9,576 | 33,652 |
| August | 10,115 | 27,221 |
| September.. .. | 9,507 | 30,278 |
| October..... | 7,613 | 21,761 |
| November..... | 7,651 | 25,625 |
| December..... | 8,360 | 23,427 |
| Total..... | 96,847 | \$300,319 |

RECAPITULATION.

| | |
|------------------------------|--------|
| Total Number of Arrests..... | 96,847 |
| Males..... | 74,966 |
| Females..... | 21,881 |
| | 96,847 |
| Married..... | 26,484 |
| Single..... | 70,363 |
| | 96,847 |

VALUE OF PROPERTY REPORTED STOLEN AND VALUE OF LOST AND STOLEN PROPERTY RECOVERED.

| MONTHS. | Value of property reported stolen, as estimated by owners. | Value of all property recovered and returned to owners, including horses and vehicles reported lost or stolen. | Value of stolen property recovered, not including horses and vehicles. |
|----------------|--|--|--|
| January..... | \$39,748 05 | \$39,420 00 | \$17,945 00 |
| February..... | 28,637 55 | 35,245 00 | 15,845 00 |
| March..... | 34,591 70 | 37,375 00 | 23,575 00 |
| April..... | 38,623 95 | 31,201 00 | 18,478 00 |
| May..... | 38,063 50 | 32,605 00 | 19,885 00 |
| June..... | 37,168 40 | 35,455 00 | 23,070 00 |
| July..... | 40,687 70 | 34,184 00 | 24,774 00 |
| August..... | 38,774 65 | 24,405 00 | 8,370 00 |
| September..... | 35,695 60 | 48,482 00 | 36,032 00 |
| October..... | 40,977 70 | 40,740 00 | 21,220 00 |
| November..... | 41,467 05 | 33,690 00 | 16,005 00 |
| December..... | 38,993 10 | 37,020 00 | 20,780 00 |
| Total..... | \$453,428 95 | \$429,822 00 | \$245,979 00 |

CLASSIFICATION OF AGES OF PERSONS ARRESTED.

| | |
|--|--------|
| Under ten years of age | 326 |
| From ten to twenty years..... | 16,695 |
| From twenty to thirty years | 43,690 |
| From thirty to forty years..... | 22,469 |
| From forty to fifty years | 9,284 |
| From fifty to sixty years..... | 3,270 |
| From sixty to seventy years..... | 948 |
| From seventy to eighty years. | 152 |
| From eighty to ninety years..... | 12 |
| From ninety to one hundred years | 1 |

NATIONALITIES.

| | 1896. | 1895. | 1894. | 1893. | 1892. |
|--------------------------|--------|--------|--------|--------|--------|
| Americans..... | 56,264 | 47,597 | 53,328 | 56,485 | 49,285 |
| Americans (colored)..... | 9,490 | 8,106 | 7,903 | 9,627 | 10,235 |
| Arabian..... | 39 | 13 | 6 | 102 | 40 |
| Australian..... | 22 | 2 | 21 | 25 | 9 |
| Austrian..... | 411 | 364 | 288 | 304 | 222 |
| Bohemian..... | 1,060 | 1,051 | 1,260 | 1,194 | 1,109 |
| Belgian..... | 60 | 41 | 57 | 55 | 57 |
| Canadians..... | 1,130 | 958 | 889 | 1,148 | 1,090 |
| Chinese..... | 714 | 661 | 320 | 169 | 291 |
| Cubans..... | 5 | ..... | 5 | 9 | 6 |
| Danes..... | 343 | 332 | 302 | 426 | 331 |
| East Indian..... | 1 | 2 | 6 | 8 | 8 |
| English..... | 1,099 | 1,139 | 1,131 | 1,496 | 1,445 |
| French..... | 980 | 768 | 826 | 1,291 | 722 |
| Germans..... | 8,957 | 7,994 | 8,003 | 8,926 | 8,928 |
| Greek..... | 593 | 458 | 583 | 438 | 295 |
| Hollanders..... | 161 | 120 | 140 | 156 | 141 |
| Hungarian..... | 173 | 107 | 116 | 137 | 140 |
| Indians..... | 29 | 5 | 15 | 18 | 7 |
| Italians..... | 1,540 | 1,227 | 1,370 | 1,450 | 1,122 |
| Irish..... | 5,709 | 5,549 | 5,164 | 6,436 | 7,666 |
| Japanese..... | 4 | 9 | 3 | 13 | 6 |
| Mexican..... | 18 | 14 | 6 | 22 | 10 |
| Norwegian..... | 826 | 716 | 792 | 903 | 918 |
| Polanders..... | 2,998 | 2,406 | 2,372 | 2,381 | 1,876 |
| Portugese..... | 17 | 10 | 16 | 17 | 14 |
| Russians..... | 1,680 | 1,354 | 1,196 | 1,222 | 1,100 |
| Swedes..... | 1,831 | 1,725 | 1,639 | 1,729 | 1,888 |
| Scotch..... | 479 | 543 | 425 | 544 | 677 |
| Spanish..... | 26 | 63 | 20 | 50 | 21 |
| Swiss..... | 78 | 60 | 63 | 77 | 67 |
| Turks..... | 12 | 4 | 6 | 36 | 8 |
| Welsh..... | 55 | 49 | 34 | 80 | 70 |
| Finlanders..... | 15 | 18 | 18 | 20 | 20 |
| Esquimaux..... | ..... | ..... | 7 | ..... | ..... |
| Algerian..... | 18 | ..... | 1 | ..... | ..... |
| Sicilians..... | ..... | ..... | 2 | 6 | 15 |
| Total..... | 96,847 | 83,464 | 88,323 | 96,976 | 89,833 |

DEPARTMENT OF POLICE.

DISPOSITION OF CASES.

| | 1896. | 1895. | 1894. | 1893. | 1892. |
|---|--------|--------|--------|--------|--------|
| Number discharged in Police Court..... | | 49,087 | 45,995 | 47,220 | 41,919 |
| Number sent to County Agent..... | 59,365 | 5 | 12 | 26 | 31 |
| Number sent to the Home of the Friendless..... | 11 | 4 | | 2 | 6 |
| Number sent to Catholic Asylum..... | | 35 | 48 | 39 | 39 |
| Number turned over to United States Commissioner..... | 16 | 1 | 3 | 1 | 3 |
| Number bound over to keep the peace..... | | 2,337 | 2,226 | 2,618 | 2,655 |
| Number fined in Police Court..... | 2,626 | 22,878 | 31,086 | 38,253 | 37,131 |
| Number sent to House of Good Shepherd..... | 24,869 | 42 | 39 | 22 | 38 |
| Number held on Criminal Charges..... | 16 | 4,343 | 5,109 | 4,700 | 3,454 |
| Number changes of venue to private Justices..... | 4,567 | 4,052 | 3,652 | 3,829 | 4,101 |
| Number sent to Foundling's Home..... | 5,333 | 2 | | 8 | 5 |
| Number sent to Washington Home..... | | 5 | 36 | 148 | 278 |
| Number sent to Martha Washington Home..... | 3 | 9 | 7 | 37 | 52 |
| Number sent to Erring Woman's Refuge..... | 6 | 19 | 26 | 37 | 35 |
| Number sent to County Physician..... | 8 | 37 | 41 | 29 | 78 |
| Number sent to St. Vincent Orphan Asylum..... | 23 | 4 | | 1 | 1 |
| Number sent to St. Joseph Orphan Asylum..... | | | | | 3 |
| Number sent to County Hospital..... | 1 | 2 | | | |
| Number sent to Servite Sisters..... | | | | | |
| Number married in Court..... | 3 | 2 | 3 | | 7 |
| Number turned over to Humane Society..... | | | | | |
| Total..... | 96,847 | 83,464 | 88,323 | 96,976 | 89,883 |

CLASSIFICATION OF OFFENSES.

| CHARGES. | 1896. | 1895. | 1894. | 1893. |
|--|-------|-------|-------|-------|
| Abandonment..... | 283 | 219 | 152 | ..... |
| Abduction..... | 38 | 24 | 21 | 48 |
| Abortion..... | 5 | 8 | 8 | 4 |
| Accessory to Murder..... | 14 | 14 | 11 | 12 |
| Accessory to Rape..... | ..... | ..... | ..... | 2 |
| Accessory to Assault..... | 9 | 16 | 13 | 7 |
| Accessory to Burglary..... | 105 | 70 | 53 | 50 |
| Accessory to Larceny..... | 344 | 373 | 182 | 185 |
| Accessory to Robbery..... | 123 | 128 | 99 | 69 |
| Adultery..... | 135 | 132 | 115 | 109 |
| Arson..... | 32 | 28 | 36 | 40 |
| Assault..... | 4923 | 4231 | 4248 | 3874 |
| Assaulting an Officer..... | 2 | 2 | 4 | 4 |
| Assault with a deadly weapon..... | 606 | 504 | 592 | 625 |
| Assault with intent to commit rape..... | 110 | 74 | 71 | 82 |
| Assault with intent to rob..... | 149 | 111 | 99 | 170 |
| Assault with intent to kill..... | 607 | 564 | 578 | 484 |
| Assault with intent to do bodily injury..... | 571 | 607 | 504 | 372 |
| Attempted Murder..... | 8 | 4 | 19 | 16 |
| Attempt to commit larceny..... | 31 | 35 | 22 | 34 |
| Attempt to commit burglary..... | 192 | 166 | 164 | 200 |
| Bastardy..... | 138 | 136 | 110 | 162 |
| Bigamy..... | 40 | 50 | 11 | 26 |
| Burglary..... | 1947 | 1985 | 2503 | 2065 |
| Carrying concealed weapons..... | 1084 | 1115 | 1357 | 1861 |
| Cock fighting..... | 69 | 156 | ..... | ..... |
| Compounding a felony..... | ..... | 1 | 1 | ..... |
| Conspiracy..... | 23 | 13 | 22 | 74 |
| Contempt of Court..... | 16 | 7 | 15 | 38 |
| Counterfeiting..... | 2 | 2 | 4 | ..... |
| Criminal carelessness..... | 19 | 28 | 16 | 37 |
| Crime against nature..... | 13 | 12 | 2 | 24 |
| Cruelty to animals..... | 74 | 72 | 66 | 97 |
| Cruelty to children..... | 22 | 9 | 8 | 4 |
| Decoying to a gaming house..... | ..... | ..... | 2 | ..... |
| Destitute..... | 3 | 7 | 4 | 11 |
| Disorderly..... | 50641 | 44450 | 49072 | 55427 |
| Distributing obscene literature..... | 1 | 7 | 2 | 1 |
| Dog fighting..... | 2 | ..... | ..... | 27 |
| Doing business without a license..... | 369 | 558 | 476 | 1807 |
| Embezzlement..... | 150 | 129 | 131 | 143 |
| Exposing person..... | 135 | 132 | 132 | 191 |
| Extortion by threats..... | 1 | 2 | 2 | 40 |
| Fast driving..... | 85 | 104 | 144 | 158 |
| Forgery..... | 122 | 73 | 125 | 87 |
| Fugitives from justice..... | 30 | 28 | 19 | 26 |
| Having burglar's tools..... | 15 | 6 | 4 | 17 |
| Having gaming devices..... | 4 | 3 | 5 | 2 |
| Horse stealing..... | 6 | ..... | ..... | 7 |
| Illegal voting..... | 19 | 1 | 6 | 3 |
| Incest..... | 7 | 5 | 5 | 6 |
| Inmates of assignation house..... | 92 | 53 | 53 | 8 |
| Inmates of disorderly house..... | 205 | 105 | 21 | 17 |
| Inmates of gaming house..... | 2535 | 1802 | 879 | 996 |
| Inmates of house of ill fame..... | 5547 | 2894 | 2516 | 4167 |
| Inmates of opium den..... | 528 | 1112 | 943 | 363 |
| Interfering with officer in discharge of duty..... | 48 | 24 | 104 | 59 |

CLASSIFICATION OF OFFENSES—Continued.

| CHARGES. | 1896. | 1895. | 1894. | 1893. |
|--|-------|-------|-------|-------|
| Intimidation..... | 15 | 5 | 17 | 2 |
| Keeping assignation house..... | 15 | 9 | 14 | 2 |
| Keeping a disorderly house..... | 30 | 28 | 39 | 34 |
| Keeping a gaming house..... | 310 | 300 | 238 | 261 |
| Keeping a house of ill fame..... | 241 | 210 | 174 | 297 |
| Kidnapping..... | 14 | 11 | 5 | 5 |
| Larceny..... | 6780 | 6600 | 6957 | 7237 |
| Larceny as bailee..... | 459 | 442 | 419 | 482 |
| Leaving team unhitched..... | 2 | 15 | 3 | 24 |
| Lounging on street corners..... | 194 | 223 | 211 | 238 |
| Malicious mischief..... | 602 | 439 | 439 | 392 |
| Manslaughter..... | 6 | 25 | 3 | 8 |
| Mayhem..... | 49 | 60 | 60 | 74 |
| Murder..... | 29 | 38 | 43 | 40 |
| Obstructing street cars..... | 62 | 34 | 13 | 28 |
| Obtaining goods under false pretenses.... | 101 | 112 | 117 | 216 |
| Obtaining money under false pretenses.... | 550 | 387 | 554 | 605 |
| Passing counterfeit money..... | 11 | 34 | 17 | 17 |
| Peddling without license..... | 323 | 261 | 380 | 212 |
| Perjury..... | 43 | 21 | 11 | 17 |
| Prize fighting..... | ..... | 11 | 128 | ..... |
| Rape..... | 106 | 78 | 72 | 86 |
| Receiving stolen property..... | 401 | 301 | 373 | 296 |
| Representing himself an officer..... | 68 | 90 | 114 | 118 |
| Resisting an officer..... | 911 | 869 | 1164 | 1326 |
| Riot..... | 46 | 37 | 76 | 30 |
| Robbery..... | 1083 | 1099 | 1072 | 1062 |
| Selling liquor to drunkards..... | 19 | 15 | 17 | 15 |
| Selling liquor to minors..... | 21 | 27 | 21 | 27 |
| Shooting inside of city limits..... | 265 | 265 | 353 | 413 |
| Swindling..... | 202 | 174 | 246 | 125 |
| Threats..... | 1699 | 1537 | 1611 | 1203 |
| Vagrancy..... | 1988 | 1197 | 1256 | 2154 |
| Violation of ordinance concerning bathing | 80 | 87 | 76 | 203 |
| Violation begging ordinance..... | 4 | 7 | ..... | 18 |
| Violation bridge ordinance..... | 7 | 4 | 7 | 9 |
| Violation building ordinance..... | 50 | 37 | 130 | 109 |
| Violation depot ordinance..... | 2 | 2 | 6 | 5 |
| Violation dog ordinance..... | 731 | 453 | 568 | 695 |
| Violation express ordinance..... | 41 | 5 | 23 | 19 |
| Violation hack ordinance..... | 36 | 24 | 48 | 101 |
| Violation health ordinance..... | 81 | 103 | 126 | 208 |
| Violation junk dealers' ordinance..... | 50 | 53 | 54 | 31 |
| Violation park ordinance..... | 575 | 128 | 92 | 178 |
| Violation pawnbrokers' ordinance..... | 15 | 4 | 14 | 16 |
| Violation porters' and runners' ordinance | ..... | 69 | 3 | 17 |
| Violation railway ordinance..... | 1023 | 597 | 829 | 509 |
| Violation saloon ordinance..... | 1359 | 1283 | 717 | 913 |
| Violation sidewalk ordinance..... | 157 | 129 | 198 | 154 |
| Violation street ordinance..... | 122 | 160 | 243 | 266 |
| Violation telegraph ordinance..... | 1 | 3 | 9 | 3 |
| Violation vehicle ordinance..... | 66 | 68 | 30 | 64 |
| Violation weights and measures ordinance | 365 | 219 | 10 | 30 |
| Violation of different other ordinances... | 3164 | 2684 | 3131 | 2083 |
| Total..... | 96847 | 83464 | 88323 | 96976 |

SUMMARY OF THE POLICE ALARM TELEPHONE SERVICE, 1896.

FIRST PRECINCT.

| | |
|---|---------|
| Reports received from policemen in district..... | 210,959 |
| Alarms responded to..... | 6,269 |
| Arrests made..... | 3,959 |
| Fires attended..... | 151 |
| Miles traveled..... | 13,925½ |
| False alarms..... | 306 |
| Sick and injured persons taken to hospital..... | 267 |
| Sick and injured persons taken home..... | 118 |
| Sick and injured persons taken to station..... | 34 |
| Dead bodies taken to morgue..... | 72 |
| Dead bodies taken to residence..... | |
| Disturbances suppressed without arrests..... | 8 |
| Insane persons cared for..... | 54 |
| Destitute persons cared for..... | 16 |
| Prisoners taken to county jail..... | 2,308 |
| Prisoners taken to Division Police Court..... | 6,862 |
| Packages stolen property recovered..... | 8 |
| Lost children taken to parents..... | 60 |
| Mad or crippled animals killed..... | |
| Runaway horses overtaken and stopped..... | |
| Stolen horses recovered..... | |
| Stolen vehicles recovered..... | 1 |
| Abandoned children taken to Foundling's Home..... | 4 |
| Persons rescued from drowning..... | 2 |
| Inebriates taken to Washingtonian Home..... | 3 |
| Persons taken to the House of Good Shepherd..... | 1 |
| Persons taken to the Home of the Friendless..... | 1 |
| Persons taken to Erring Woman's Refuge..... | |
| Persons taken to St. Vincent's Orphan Asylum..... | 1 |
| Persons taken to St. Joseph's Orphan Asylum..... | |
| Persons taken to County Agent..... | 20 |
| Miscellaneous and incidental..... | 2,403 |

SECOND PRECINCT.

| | |
|---|---------|
| Reports received from policemen in district..... | 167,373 |
| Alarms responded to..... | 4,859 |
| Arrests made..... | 6,693 |
| Fires attended | 145 |
| Miles traveled..... | 9,946½ |
| False alarms..... | 36 |
| Sick and injured persons taken to hospital | 215 |
| Sick and injured persons taken home..... | 58 |
| Sick and injured persons taken to station..... | 41 |
| Dead bodies taken to morgue..... | 62 |
| Dead bodies taken to residence..... | 2 |
| Disturbances suppressed without arrests..... | 39 |
| Insane persons cared for..... | 93 |
| Destitute persons cared for..... | 30 |
| Prisoners taken to county jail | 1,362 |
| Prisoners taken to Division Police Court..... | 143 |
| Packages stolen property recovered..... | 10 |
| Lost children to parents..... | 18 |
| Mad or crippled animals killed..... | |
| Runaway horses overtaken and stopped..... | |
| Stolen horses recovered..... | |
| Stolen vehicles recovered.... | 1 |
| Abandoned children taken to Foundling's Home..... | 7 |
| Persons rescued from drowning..... | |
| Inebriates taken to Washingtonian Home..... | 3 |
| Persons taken to the House of Good Shepherd..... | 12 |
| Persons taken to the Home of the Friendless..... | 11 |
| Persons taken to Erring Woman's Refuge..... | 21 |
| Persons taken to St. Vincent's Orphan Asylum..... | 2 |
| Persons taken to St. Joseph's Orphan Asylum | |
| Persons taken to County Agent | 35 |
| Miscellaneous and incidental..... | 1,576 |

THIRD PRECINCT.

| | |
|---|---------|
| Reports received from policemen in district..... | 139,033 |
| Alarms responded to..... | 2,774 |
| Arrests made..... | 2,528 |
| Fires attended..... | 131 |
| Miles traveled..... | 10,267 |
| False alarms..... | 20 |
| Sick and injured persons taken to hospital | 131 |
| Sick and injured persons taken home..... | 86 |
| Sick and injured persons taken to station. | 24 |
| Dead bodies taken to morgue..... | 30 |
| Dead bodies taken to residence..... | 4 |
| Disturbances suppressed without arrests..... | 94 |
| Insane persons cared for..... | 21 |
| Destitute persons cared for..... | 4 |
| Prisoners taken to county jail. | 237 |
| Prisoners taken to Division Police Court..... | 1,219 |
| Packages stolen property recovered..... | 24 |
| Lost children taken to parents..... | 46 |
| Mad or crippled animals killed..... | 1 |
| Runaway horses overtaken and stopped..... | |
| Stolen horses recovered..... | 1 |
| Stolen vehicles recovered..... | |
| Abandoned children taken to Foundling's Home..... | 2 |
| Persons rescued from drowning..... | |
| Inebriates taken to Washingtonian Home..... | 1 |
| Persons taken to the House of Good Shepherd..... | 3 |
| Persons taken to the Home of the Friendless..... | |
| Persons taken to the Erring Woman's Refuge | |
| Persons taken to St. Vincent's Orphan Asylum..... | |
| Persons taken to St. Joseph's Orphan Asylum..... | |
| Persons taken to County Agent..... | 9 |
| Miscellaneous and incidental..... | 1,618 |

FOURTH PRECINCT.

| | |
|---|---------|
| Reports received from policemen in district..... | 217,335 |
| Alarms responded to..... | 1,956 |
| Arrests made..... | 1,252 |
| Fires attended..... | 107 |
| Miles traveled..... | 7,498 |
| False alarms..... | 85 |
| Sick and injured persons taken to hospital..... | 128 |
| Sick and injured persons taken home..... | 56 |
| Sick and injured persons taken to station..... | 8 |
| Dead bodies taken to morgue..... | 23 |
| Dead bodies taken to residence..... | 7 |
| Disturbances suppressed without arrests..... | 33 |
| Insane persons cared for..... | 14 |
| Destitute persons cared for..... | 2 |
| Prisoners taken to county jail..... | 11 |
| Prisoners taken to Division Police Court..... | 790 |
| Packages stolen property recovered..... | 162 |
| Lost children taken to parents..... | 31 |
| Mad or crippled animals killed..... | |
| Runaway horses overtaken and stopped..... | |
| Stolen horses recovered..... | |
| Stolen vehicles recovered..... | |
| Abandoned children taken to Foundling's Home..... | 1 |
| Persons rescued from drowning..... | |
| Inebriates taken to Washingtonian Home..... | |
| Persons taken to the House of Good Shepherd..... | |
| Persons taken to the Home of the Friendless..... | |
| Persons taken to Erring Woman's Refuge..... | 4 |
| Persons taken to St. Vincent's Orphan Asylum..... | 4 |
| Persons taken to St. Joseph's Orphan Asylum..... | 1 |
| Persons taken to County Agent..... | 1 |
| Miscellaneous and incidentals..... | 1,018 |

FIFTH PRECINCT.

| | |
|--|---------|
| Reports received from policemen in district | 154,419 |
| Alarms responded to | 1,738 |
| Arrests made | 1,884 |
| Fires attended | 150 |
| Miles traveled | 6,710½ |
| False alarms | 32 |
| Sick and injured persons taken to hospital | 69 |
| Sick and injured persons taken home | 59 |
| Sick and injured persons taken to station | 4 |
| Dead bodies taken to morgue | 12 |
| Dead bodies taken to residence | 2 |
| Disturbances suppressed without arrests | 72 |
| Insane persons cared for | 11 |
| Destitute persons cared for | 15 |
| Prisoners taken to county jail | 103 |
| Prisoners taken to Division Police Court | 546 |
| Packages stolen property recovered | 17 |
| Lost children taken to parents | 32 |
| Mad or crippled animals killed | 2 |
| Runaway horses overtaken and stopped | 3 |
| Stolen horses recovered | 2 |
| Stolen vehicles recovered | |
| Abandoned children taken to Foundling's Home | 1 |
| Persons rescued from drowning | |
| Inebriates taken to Washingtonian Home | |
| Persons taken to the House of Good Shepherd | |
| Persons taken to the Home of the Friendless | |
| Persons taken to Erring Women's Refuge | 3 |
| Persons taken to St. Vincent's Orphan Asylum | |
| Persons taken to St. Joseph's Orphan Asylum | |
| Persons taken to County Agent | 3 |
| Miscellaneous and incidental | 748 |

SIXTH PRECINCT.

| | |
|---|---------|
| Reports received from policemen in district..... | 119,390 |
| Alarms responded to..... | 1,453 |
| Arrests made..... | 1,035 |
| Fires attended..... | 79 |
| Miles traveled..... | 6,289 |
| False alarms..... | 16 |
| Sick and injured persons taken to hospital..... | 62 |
| Sick and injured persons taken home..... | 73 |
| Sick and injured persons taken to station..... | 4 |
| Dead bodies taken to morgue..... | 9 |
| Dead bodies taken to residence..... | 3 |
| Disturbances suppressed without arrests..... | 75 |
| Insane persons cared for..... | 23 |
| Destitute persons cared for..... | 4 |
| Prisoners taken to county jail..... | 54 |
| Prisoners taken to Division Police Court..... | 146 |
| Packages stolen property recovered..... | 17 |
| Lost children taken to parents..... | 30 |
| Mad or crippled animals killed..... | 1 |
| Runaway horses overtaken and stopped..... | |
| Stolen horses recovered..... | |
| Stolen vehicles recovered..... | |
| Abandoned children taken to Foundling's Home..... | 2 |
| Persons rescued from drowning..... | |
| Inebriates taken to Washingtonian Home..... | |
| Persons taken to the House of Good Shepherd..... | 1 |
| Persons taken to the Home of the Friendless..... | |
| Persons taken to Erring Woman's Refuge..... | 1 |
| Persons taken to St. Vincent's Orphan Asylum..... | |
| Persons taken to St. Joseph's Orphan Asylum..... | |
| Persons taken to County Agent..... | 1 |
| Miscellaneous and incidental..... | 1,106 |

SEVENTH PRECINCT.

| | |
|---|--------|
| Reports received from policemen in district..... | 98,973 |
| Alarms responded to..... | 1,424 |
| Arrests made..... | 823 |
| Fires attended..... | 47 |
| Miles traveled..... | 5,258½ |
| False alarms..... | 17 |
| Sick and injured persons taken to hospital..... | 92 |
| Sick and injured persons taken home..... | 66 |
| Sick and injured persons taken to station..... | 12 |
| Dead bodies taken to morgue..... | 5 |
| Dead bodies taken to residence..... | 3 |
| Disturbances suppressed without arrests..... | 74 |
| Insane persons cared for..... | 7 |
| Destitute persons cared for..... | 3 |
| Prisoners taken to county jail..... | 103 |
| Prisoners taken to Division Police Court..... | 585 |
| Packages stolen property recovered..... | 6 |
| Lost children taken to parents..... | 24 |
| Mad or crippled animals killed..... | |
| Runaway horses overtaken and stopped..... | |
| Stolen horses recovered..... | 1 |
| Stolen vehicles recovered..... | 1 |
| Abandoned children taken to Foundling's Home..... | |
| Persons rescued from drowning..... | |
| Inebriates taken to Washingtonian Home..... | 1 |
| Persons taken to the House of Good Shepherd..... | 5 |
| Persons taken to the Home of the Friendless..... | |
| Persons taken to Erring Woman's Refuge..... | |
| Persons taken to St. Vincent's Orphan Asylum..... | |
| Persons taken to St. Joseph's Orphan Asylum..... | |
| Persons taken to County Agent..... | 1 |
| Miscellaneous and incidental..... | 307 |

EIGHTH PRECINCT.

| | |
|---|--------|
| Reports received from policemen in district..... | 47,616 |
| Alarms responded to..... | 722 |
| Arrests made..... | 286 |
| Fires attended..... | 25 |
| Miles traveled..... | 4,226 |
| False alarms..... | 17 |
| Sick and injured persons taken to hospital..... | 43 |
| Sick and injured persons taken home..... | 24 |
| Sick and injured persons taken to station..... | 11 |
| Dead bodies taken to morgue..... | 12 |
| Dead bodies taken to residence..... | 4 |
| Disturbances suppressed without arrests..... | 23 |
| Insane persons cared for..... | 10 |
| Destitute persons cared for..... | 4 |
| Prisoners taken to county jail..... | 34 |
| Prisoners taken to Division Police Court..... | 291 |
| Packages stolen property recovered..... | 15 |
| Lost children taken to parents..... | 11 |
| Mad or crippled animals killed..... | 1 |
| Runaway horses overtaken and stopped..... | |
| Stolen horses recovered..... | |
| Stolen vehicles recovered..... | |
| Abandoned children taken to Foundling's Home..... | |
| Persons rescued from drowning..... | |
| Inebriates taken to Washingtonian Home..... | |
| Persons taken to the House of Good Shepherd..... | 1 |
| Persons taken to the Home of the Friendless..... | |
| Persons taken to Erring Woman's Refuge..... | |
| Persons taken to St. Vincent's Orphan Asylum..... | |
| Persons taken to St. Joseph's Orphan Asylum..... | |
| Persons taken to County Agent..... | |
| Miscellaneous and incidental..... | 271 |

NINTH PRECINCT.

(Not opened.)

TENTH PRECINCT.

| | |
|--|---------|
| Reports received from policemen in district | 281,106 |
| Alarms responded to | 1,651 |
| Arrests made | 539 |
| Fires attended | 82 |
| Miles traveled | 6,820 |
| False alarms | 36 |
| Sick and injured persons taken to hospital | 52 |
| Sick and injured persons taken home | 24 |
| Sick and injured persons taken to station | 6 |
| Dead bodies taken to morgue | 20 |
| Dead bodies taken to residence | |
| Disturbances suppressed without arrests | 8 |
| Insane persons cared for | 6 |
| Destitute persons cared for | |
| Prisoners taken to county jail | 2 |
| Prisoners taken to Division Police Court | |
| Packages stolen property recovered | |
| Lost children taken to parents | 12 |
| Mad or crippled animals killed | 1 |
| Runaway horses overtaken and stopped | 6 |
| Stolen horses recovered | 2 |
| Stolen vehicles recovered | 1 |
| Abandoned children taken to Foundling's Home | |
| Persons rescued from drowning | 2 |
| Inebriates taken to Washingtonian Home | 1 |
| Persons taken to the House of Good Shepherd | |
| Persons taken to the Home of the Friendless | |
| Persons taken to Erring Women's Refuge | 1 |
| Persons taken to St. Vincent's Orphan Asylum | |
| Persons taken to St. Joseph's Orphan Asylum | |
| Persons taken to County Agent | 2 |
| Miscellaneous and incidental | 779 |

ELEVENTH PRECINCT.

| | |
|---|---------|
| Reports received from policemen in district..... | 232,713 |
| Alarms responded to..... | 1,378 |
| Arrests made..... | 770 |
| Fires attended | 151 |
| Miles traveled..... | 6,191 |
| False alarms..... | 42 |
| Sick and injured persons taken to hospital..... | 35 |
| Sick and injured persons taken home..... | 60 |
| Sick and injured persons taken to station..... | 12 |
| Dead bodies taken to morgue..... | 14 |
| Dead bodies taken to residence..... | 1 |
| Disturbances suppressed without arrests..... | 75 |
| Insane persons cared for..... | 7 |
| Destitute persons cared for..... | |
| Prisoners taken to county jail..... | 4 |
| Prisoners taken to Division Police Court..... | 443 |
| Packages stolen property recovered | 27 |
| Lost children taken to parents..... | 24 |
| Mad or crippled animals killed..... | 2 |
| Runaway horses overtaken and stopped..... | 5 |
| Stolen horses recovered..... | 3 |
| Stolen vehicles recovered..... | 1 |
| Abandoned children taken to Foundling's Home..... | |
| Persons rescued from drowning..... | |
| Inebriates taken to Washingtonian Home | 1 |
| Persons taken to the House of Good Shepherd | |
| Persons taken to the Home of the Friendless..... | |
| Persons taken to Erring Woman's Refuge..... | 2 |
| Persons taken to St. Vincent's Orphan Asylum.... | 1 |
| Persons taken to St. Joseph's Orphan Asylum | |
| Persons taken to County Agent..... | 1 |
| Miscellaneous and incidental..... | 416 |

TWELFTH PRECINCT.

| | |
|---|---------|
| Reports received from policemen in district..... | 100,523 |
| Alarms responded to..... | 848 |
| Arrests made..... | 497 |
| Fires attended..... | 59 |
| Miles traveled..... | 3,564½ |
| False alarms..... | 26 |
| Sick and injured persons taken to hospital..... | 17 |
| Sick and injured persons taken home..... | 41 |
| Sick and injured persons taken to station..... | 12 |
| Dead bodies taken to morgue..... | 15 |
| Dead bodies taken to residence..... | |
| Disturbances suppressed without arrests..... | 15 |
| Insane persons cared for..... | 4 |
| Destitute persons cared for..... | 2 |
| Prisoners taken to county jail..... | |
| Prisoners taken to Division Police Court..... | 502 |
| Packages stolen property recovered..... | 4 |
| Lost children taken to parents..... | 12 |
| Mad or crippled animals killed..... | |
| Runaway horses overtaken and stopped..... | 4 |
| Stolen horses recovered..... | 4 |
| Stolen vehicles recovered..... | |
| Abandoned children taken to Foundling's Home..... | |
| Persons rescued from drowning..... | |
| Inebriates taken to Washingtonian Home..... | |
| Persons taken to the House of Good Shepherd..... | |
| Persons taken to the Home of the Friendless..... | |
| Persons taken to Erring Woman's Refuge..... | 1 |
| Persons taken to St. Vincent's Orphan Asylum..... | |
| Persons taken to St. Joseph's Orphan Asylum..... | |
| Persons taken to County Agent..... | |
| Miscellaneous and incidental..... | 127 |

THIRTEENTH PRECINCT.

| | |
|---|--------|
| Reports received from policemen in district..... | 97,505 |
| Alarms responded to..... | 557 |
| Arrests made..... | 245 |
| Fires attended..... | 65 |
| Miles traveled..... | 3,859 |
| False alarms..... | 3 |
| Sick and injured persons taken to hospital..... | 42 |
| Sick and injured persons taken home..... | 35 |
| Sick and injured persons taken to station..... | 10 |
| Dead bodies taken to morgue..... | 12 |
| Dead bodies taken to residence..... | |
| Disturbances suppressed without arrests..... | 12 |
| Insane persons cared for..... | 5 |
| Destitute persons cared for..... | 7 |
| Prisoners taken to county jail..... | 3 |
| Prisoners taken to Division Police Court..... | 223 |
| Packages stolen property recovered..... | 10 |
| Lost children taken to parents..... | 8 |
| Mad or crippled animals killed..... | |
| Runaway horses overtaken and stopped..... | 2 |
| Stolen horses recovered..... | 1 |
| Stolen vehicles recovered..... | 1 |
| Abandoned children taken to Foundling's Home..... | |
| Persons rescued from drowning..... | |
| Inebriates taken to Washingtonian Home..... | |
| Persons taken to the House of Good Shepherd..... | |
| Persons taken to the Home of the Friendless..... | |
| Persons taken to Erring Woman's Refuge..... | |
| Persons taken to St. Vincent's Orphan Asylum..... | |
| Persons taken to St. Joseph's Orphan Asylum..... | |
| Persons taken to County Agent..... | |
| Miscellaneous and incidental..... | 166 |

FOURTEENTH PRECINCT.

| | |
|---|--------|
| Reports received from policemen in district..... | 73,629 |
| Alarms responded to..... | 424 |
| Arrests made..... | 152 |
| Fires attended..... | 53 |
| Miles traveled..... | 1,584 |
| False alarms..... | 26 |
| Sick and injured persons taken to hospital..... | 15 |
| Sick and injured persons taken home..... | 51 |
| Sick and injured persons taken to station..... | 17 |
| Dead bodies taken to morgue..... | 14 |
| Dead bodies taken to residence..... | |
| Disturbances suppressed without arrests..... | 35 |
| Insane persons cared for..... | 9 |
| Destitute persons cared for..... | 1 |
| Prisoners taken to county jail..... | |
| Prisoners taken to Division Police Court..... | 2 |
| Packages stolen property recovered..... | |
| Lost children taken to parents..... | 10 |
| Mad or crippled animals killed..... | 5 |
| Runaway horses overtaken and stopped..... | 2 |
| Stolen horses recovered..... | 4 |
| Stolen vehicles recovered..... | 2 |
| Abandoned children taken to Foundling's Home..... | |
| Persons rescued from drowning..... | |
| Inebriates taken to Washingtonian Home..... | |
| Persons taken to the House of Good Shepherd..... | |
| Persons taken to the Home of the Friendless..... | |
| Persons taken to Erring Woman's Refuge..... | |
| Persons taken to St. Vincent's Orphan Asylum..... | |
| Persons taken to St. Joseph's Orphan Asylum..... | |
| Persons taken to County Agent..... | |
| Miscellaneous and incidental..... | 68 |

FIFTEENTH PRECINCT.

| | |
|---|---------|
| Reports received from policemen in district..... | 118,581 |
| Alarms responded to..... | 1,492 |
| Arrests made..... | 1,125 |
| Fires attended..... | 131 |
| Miles traveled..... | 3,440 |
| False alarms..... | 14 |
| Sick and injured persons taken to hospital | 88 |
| Sick and injured persons taken home..... | 108 |
| Sick and injured persons taken to station. | 41 |
| Dead bodies taken to morgue..... | 31 |
| Dead bodies taken to residence..... | 8 |
| Disturbances suppressed without arrests..... | 29 |
| Insane persons cared for..... | 21 |
| Destitute persons cared for..... | 1 |
| Prisoners taken to county jail. | |
| Prisoners taken to Division Police Court..... | |
| Packages stolen property recovered..... | 11 |
| Lost children taken to parents..... | 29 |
| Mad or crippled animals killed..... | 1 |
| Runaway horses overtaken and stopped | |
| Stolen horses recovered..... | 2 |
| Stolen vehicles recovered..... | 1 |
| Abandoned children taken to Foundling's Home..... | |
| Persons rescued from drowning..... | 2 |
| Inebriates taken to Washingtonian Home..... | |
| Persons taken to the House of Good Shepherd..... | 1 |
| Persons taken to the Home of the Friendless..... | |
| Persons taken to the Erring Woman's Refuge | |
| Persons taken to St. Vincent's Orphan Asylum..... | |
| Persons taken to St. Joseph's Orphan Asylum..... | |
| Persons taken to County Agent..... | 1 |
| Miscellaneous and incidental..... | 390 |

SIXTEENTH PRECINCT.

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(Abandoned.)

SEVENTEENTH PRECINCT.

| | |
|---|---------|
| Reports received from policemen in district..... | 216,408 |
| Alarms responded to..... | 1,174 |
| Arrests made..... | 768 |
| Fires attended..... | 146 |
| Miles traveled..... | 5,008½ |
| False alarms..... | 29 |
| Sick and injured persons taken to hospital | 74 |
| Sick and injured persons taken home..... | 69 |
| Sick and injured persons taken to station. | 15 |
| Dead bodies taken to morgue..... | 18 |
| Dead bodies taken to residence..... | 2 |
| Disturbances suppressed without arrests..... | 87 |
| Insane persons cared for..... | 6 |
| Destitute persons cared for..... | 6 |
| Prisoners taken to county jail. | 9 |
| Prisoners taken to Division Police Court..... | |
| Packages stolen property recovered..... | 11 |
| Lost children taken to parents..... | 27 |
| Mad or crippled animals killed..... | 6 |
| Runaway horses overtaken and stopped..... | 2 |
| Stolen horses recovered..... | 5 |
| Stolen vehicles recovered..... | 1 |
| Abandoned children taken to Foundling's Home..... | |
| Persons rescued from drowning..... | |
| Inebriates taken to Washingtonian Home..... | |
| Persons taken to the House of Good Shepherd..... | 1 |
| Persons taken to the Home of the Friendless..... | |
| Persons taken to the Erring Woman's Refuge..... | |
| Persons taken to St. Vincent's Orphan Asylum..... | |
| Persons taken to St. Joseph's Orphan Asylum..... | |
| Persons taken to County Agent..... | 1 |
| Miscellaneous and incidental..... | 258 |

EIGHTEENTH PRECINCT.

| | |
|---|--------|
| Reports received from policemen in district..... | 51,987 |
| Alarms responded to..... | 421 |
| Arrests made..... | 210 |
| Fires attended..... | 30 |
| Miles traveled..... | 3,852 |
| False alarms..... | 14 |
| Sick and injured persons taken to hospital..... | 20 |
| Sick and injured persons taken home..... | 22 |
| Sick and injured persons taken to station..... | 11 |
| Dead bodies taken to morgue..... | 8 |
| Dead bodies taken to residence..... | |
| Disturbances suppressed without arrests..... | 11 |
| Insane persons cared for..... | 12 |
| Destitute persons cared for..... | 382 |
| Prisoners taken to county jail..... | 12 |
| Prisoners taken to Division Police Court..... | 86 |
| Packages stolen property recovered..... | 8 |
| Lost children taken to parents..... | |
| Mad or crippled animals killed..... | 7 |
| Runaway horses overtaken and stopped..... | 5 |
| Stolen horses recovered..... | 3 |
| Stolen vehicles recovered..... | 3 |
| Abandoned children taken to Foundling's Home..... | |
| Persons rescued from drowning..... | |
| Inebriates taken to Washingtonian Home..... | |
| Persons taken to the House of Good Shepherd..... | |
| Persons taken to the Home of the Friendless..... | |
| Persons taken to Erring Woman's Refuge..... | 1 |
| Persons taken to St. Vincent's Orphan Asylum..... | |
| Persons taken to St. Joseph's Orphan Asylum..... | |
| Persons taken to County Agent..... | 4 |
| Miscellaneous and incidental..... | 131 |

NINETEENTH PRECINCT.

| | |
|---|---------|
| Reports received from policemen in district..... | 213,415 |
| Alarms responded to..... | 2,139 |
| Arrests made..... | 1,789 |
| Fires attended..... | 207 |
| Miles traveled..... | 8,543 |
| False alarms..... | 67 |
| Sick and injured persons taken to hospital..... | 14 |
| Sick and injured persons taken home..... | 42 |
| Sick and injured persons taken to station..... | 13 |
| Dead bodies taken to morgue..... | 21 |
| Dead bodies taken to residence..... | |
| Disturbances suppressed without arrests..... | 121 |
| Insane persons cared for..... | 9 |
| Destitute persons cared for..... | 1 |
| Prisoners taken to county jail..... | 95 |
| Prisoners taken to Division Police Court..... | 21 |
| Packages stolen property recovered..... | 19 |
| Lost children taken to parents..... | 53 |
| Mad or crippled animals killed..... | 5 |
| Runaway horses overtaken and stopped..... | 2 |
| Stolen horses recovered..... | 2 |
| Stolen vehicles recovered..... | 2 |
| Abandoned children taken to Foundling's Home..... | 1 |
| Persons rescued from drowning..... | 1 |
| Inebriates taken to Washingtonian Home..... | 2 |
| Persons taken to the House of Good Shepherd..... | 5 |
| Persons taken to the Home of the Friendless..... | |
| Persons taken to Erring Woman's Refuge..... | 1 |
| Persons taken to St. Vincent's Orphan Asylum..... | |
| Persons taken to St. Joseph's Orphan Asylum..... | |
| Persons taken to County Agent..... | 6 |
| Miscellaneous and incidental..... | 556 |

TWENTIETH PRECINCT.

(Not opened.)

TWENTY-FIRST PRECINCT.

| | |
|---|---------|
| Reports received from policemen in district..... | 245,219 |
| Alarms responded to..... | 3,070 |
| Arrests made..... | 2,241 |
| Fires attended..... | 354 |
| Miles traveled..... | 6,987 |
| False alarms..... | 71 |
| Sick and injured persons taken to hospital..... | 243 |
| Sick and injured persons taken home..... | 88 |
| Sick and injured persons taken to station..... | 7 |
| Dead bodies taken to morgue..... | 21 |
| Dead bodies taken to residence..... | 2 |
| Disturbances suppressed without arrests..... | 149 |
| Insane persons cared for..... | 91 |
| Destitute persons cared for..... | 17 |
| Prisoners taken to county jail..... | 34 |
| Prisoners taken to Division Police Court..... | |
| Packages stolen property recovered..... | 90 |
| Lost children taken to parents..... | 93 |
| Mad or crippled animals killed..... | |
| Runaway horses overtaken and stopped..... | |
| Stolen horses recovered..... | 4 |
| Stolen vehicles recovered..... | 10 |
| Abandoned children taken to Foundling's Home..... | 2 |
| Persons rescued from drowning..... | 1 |
| Inebriates taken to Washingtonian Home..... | 2 |
| Persons taken to the House of Good Shepherd..... | |
| Persons taken to the Home of the Friendless..... | |
| Persons taken to Erring Woman's Refuge..... | |
| Persons taken to St. Vincent's Orphan Asylum..... | 2 |
| Persons taken to St. Joseph's Orphan Asylum..... | |
| Persons taken to County Agent..... | 5 |
| Miscellaneous and incidental..... | 705 |

TWENTY-SECOND PRECINCT.

| | |
|---|---------|
| Reports received from policemen in district..... | 101,414 |
| Alarms responded to..... | 1,537 |
| Arrests made..... | 299 |
| Fires attended | 100 |
| Miles traveled..... | 4,727½ |
| False alarms..... | 22 |
| Sick and injured persons taken to hospital..... | 125 |
| Sick and injured persons taken home..... | 55 |
| Sick and injured persons taken to station..... | 6 |
| Dead bodies taken to morgue..... | 25 |
| Dead bodies taken to residence..... | 3 |
| Disturbances suppressed without arrests..... | 57 |
| Insane persons cared for..... | 24 |
| Destitute persons cared for..... | 4 |
| Prisoners taken to county jail | 114 |
| Prisoners taken to Division Police Court..... | 361 |
| Packages stolen property recovered..... | 4 |
| Lost children taken to parents..... | 44 |
| Mad or crippled animals killed..... | 1 |
| Runaway horses overtaken and stopped..... | 1 |
| Stolen horses recovered..... | 2 |
| Stolen vehicles recovered..... | 4 |
| Abandoned children taken to Foundling's Home..... | |
| Persons rescued from drowning. | 1 |
| Inebriates taken to Washingtonian Home.... | 11 |
| Persons taken to the House of Good Shepherd..... | |
| Persons taken to the Home of the Friendless..... | |
| Persons taken to Erring Woman's Refuge..... | |
| Persons taken to St. Vincent's Orphan Asylum..... | 2 |
| Persons taken to St. Joseph's Orphan Asylum | |
| Persons taken to County Agent | 3 |
| Miscellaneous and incidental..... | 685 |

TWENTY-THIRD PRECINCT.

| | |
|---|---------|
| Reports received from policemen in district..... | 128,319 |
| Alarms responded to..... | 1,475 |
| Arrests made..... | 830 |
| Fires attended..... | 78 |
| Miles traveled..... | 5,249 |
| False alarms..... | 37 |
| Sick and injured persons taken to hospital..... | 128 |
| Sick and injured persons taken home..... | 59 |
| Sick and injured persons taken to station..... | 10 |
| Dead bodies taken to morgue..... | 15 |
| Dead bodies taken to residence..... | 5 |
| Disturbances suppressed without arrests..... | 68 |
| Insane persons cared for..... | 46 |
| Destitute persons cared for..... | 22 |
| Prisoners taken to county jail..... | 122 |
| Prisoners taken to Division Police Court..... | 500 |
| Packages stolen property recovered..... | 8 |
| Lost children taken to parents..... | 53 |
| Mad or crippled animals killed..... | |
| Runaway horses overtaken and stopped..... | 2 |
| Stolen horses recovered..... | 2 |
| Stolen vehicles recovered..... | 1 |
| Abandoned children taken to Foundling's Home..... | 2 |
| Persons rescued from drowning..... | 1 |
| Inebriates taken to Washingtonian Home..... | 2 |
| Persons taken to the House of Good Shepherd..... | |
| Persons taken to the Home of the Friendless..... | |
| Persons taken to Erring Woman's Refuge..... | |
| Persons taken to St. Vincent's Orphan Asylum..... | |
| Persons taken to St. Joseph's Orphan Asylum..... | |
| Persons taken to County Agent..... | 1 |
| Miscellaneous and incidental..... | 385 |

TWENTY-FOURTH PRECINCT.

| | |
|---|---------|
| Reports received from policemen in district..... | 178,842 |
| Alarms responded to..... | 1,312 |
| Arrests made..... | 393 |
| Fires attended..... | 112 |
| Miles traveled..... | 4,434 |
| False alarms..... | 16 |
| Sick and injured persons taken to hospital..... | 114 |
| Sick and injured persons taken home..... | 67 |
| Sick and injured persons taken to station..... | 9 |
| Dead bodies taken to morgue..... | 21 |
| Dead bodies taken to residence..... | 1 |
| Disturbances suppressed without arrests..... | 111 |
| Insane persons cared for..... | 21 |
| Destitute persons cared for..... | 3 |
| Prisoners taken to county jail..... | 136 |
| Prisoners taken to Division Police Court..... | 286 |
| Packages stolen property recovered..... | 5 |
| Lost children taken to parents..... | 53 |
| Mad or crippled animals killed..... | |
| Runaway horses overtaken and stopped..... | |
| Stolen horses recovered..... | 1 |
| Stolen vehicles recovered..... | |
| Abandoned children taken to Foundling's Home..... | 1 |
| Persons rescued from drowning..... | |
| Inebriates taken to Washingtonian Home..... | |
| Persons taken to the House of Good Shepherd..... | |
| Persons taken to the Home of the Friendless..... | 1 |
| Persons taken to Erring Woman's Refuge..... | |
| Persons taken to St. Vincent's Orphan-Asylum..... | |
| Persons taken to St. Joseph's Orphan Asylum..... | |
| Persons taken to County Agent..... | 1 |
| Miscellaneous and incidental..... | 479 |

TWENTY-FIFTH PRECINCT.

| | |
|---|--------|
| Reports received from policemen in district..... | 61,685 |
| Alarms responded to..... | 816 |
| Arrests made..... | 146 |
| Fires attended | 34 |
| Miles traveled..... | 3,481½ |
| False alarms..... | 16 |
| Sick and injured persons taken to hospital..... | 31 |
| Sick and injured persons taken home..... | 31 |
| Sick and injured persons taken to station..... | 6 |
| Dead bodies taken to morgue..... | 5 |
| Dead bodies taken to residence..... | 4 |
| Disturbances suppressed without arrests..... | 21 |
| Insane persons cared for..... | 5 |
| Destitute persons cared for..... | 4 |
| Prisoners taken to county jail..... | 8 |
| Prisoners taken to Division Police Court..... | 86 |
| Packages stolen property recovered | 11 |
| Lost children taken to parents..... | 9 |
| Mad or crippled animals killed..... | 1 |
| Runaway horses overtaken and stopped..... | 3 |
| Stolen horses recovered..... | |
| Stolen vehicles recovered..... | |
| Abandoned children taken to Foundling's Home..... | |
| Persons rescued from drowning..... | |
| Inebriates taken to Washingtonian Home | 5 |
| Persons taken to the House of Good Shepherd | |
| Persons taken to the Home of the Friendless..... | |
| Persons taken to Erring Woman's Refuge..... | |
| Persons taken to St. Vincent's Orphan Asylum..... | |
| Persons taken to St. Joseph's Orphan Asylum | |
| Persons taken to County Agent..... | |
| Miscellaneous and incidental..... | 254 |

TWENTY-SIXTH PRECINCT.

(Not Opened.)

TWENTY-SEVENTH PRECINCT.

| | |
|---|---------|
| Reports received from policemen in district..... | 236,350 |
| Alarms responded to..... | 4,369 |
| Arrests made..... | 4,421 |
| Fires attended | 192 |
| Miles traveled..... | 6,623 |
| False alarms..... | 116 |
| Sick and injured persons taken to hospital..... | 104 |
| Sick and injured persons taken home..... | 30 |
| Sick and injured persons taken to station..... | 53 |
| Dead bodies taken to morgue..... | 46 |
| Dead bodies taken to residence..... | 9 |
| Disturbances suppressed without arrests..... | 148 |
| Insane persons cared for..... | 48 |
| Destitute persons cared for..... | 21 |
| Prisoners taken to county jail | 368 |
| Prisoners taken to Division Police Court..... | |
| Packages stolen property recovered..... | 41 |
| Lost children taken to parents..... | 67 |
| Mad or crippled animals killed..... | |
| Runaway horses overtaken and stopped..... | |
| Stolen horses recovered..... | |
| Stolen vehicles recovered.... | |
| Abandoned children taken to Foundling's Home..... | 1 |
| Persons rescued from drowning. | |
| Inebriates taken to Washingtonian Home..... | 7 |
| Persons taken to the House of Good Shepherd..... | 3 |
| Persons taken to the Home of the Friendless..... | |
| Persons taken to Erring Woman's Refuge..... | |
| Persons taken to St. Vincent's Orphan Asylum..... | 2 |
| Persons taken to St. Joseph's Orphan Asylum | |
| Persons taken to County Agent | 5 |
| Miscellaneous and incidental. | 1,201 |

TWENTY-EIGHTH PRECINCT.

| | |
|---|---------|
| Reports received from policemen in district..... | 201,602 |
| Alarms responded to..... | 2,089 |
| Arrests made..... | 231 |
| Fires attended | 139 |
| Miles traveled..... | 5,933 |
| False alarms..... | 34 |
| Sick and injured persons taken to hospital | 138 |
| Sick and injured persons taken home..... | 69 |
| Sick and injured persons taken to station..... | 12 |
| Dead bodies taken to morgue..... | 16 |
| Dead bodies taken to residence..... | 1 |
| Disturbances suppressed without arrests..... | 66 |
| Insane persons cared for..... | 20 |
| Destitute persons cared for..... | 13 |
| Prisoners taken to county jail | 136 |
| Prisoners taken to Division Police Court..... | 1,277 |
| Packages stolen property recovered..... | 15 |
| Lost children taken to parents..... | 86 |
| Mad or crippled animals killed..... | |
| Runaway horses overtaken and stopped..... | |
| Stolen horses recovered..... | 2 |
| Stolen vehicles recovered..... | 3 |
| Abandoned children taken to Foundling's Home..... | 3 |
| Persons rescued from drowning..... | |
| Inebriates taken to Washingtonian Home..... | 4 |
| Persons taken to the House of Good Shepherd..... | 3 |
| Persons taken to the Home of the Friendless..... | |
| Persons taken to Erring Woman's Refuge..... | 2 |
| Persons taken to St. Vincent's Orphan Asylum..... | |
| Persons taken to St. Joseph's Orphan Asylum | |
| Persons taken to County Agent | 4 |
| Miscellaneous and incidental..... | 384 |

TWENTY-NINTH PRECINCT.

| | |
|---|---------|
| Reports received from policemen in district..... | 216,980 |
| Alarms responded to..... | 1,372 |
| Arrests made..... | 539 |
| Fires attended..... | 86 |
| Miles traveled..... | 6,746 |
| False alarms..... | 147 |
| Sick and injured persons taken to hospital..... | 96 |
| Sick and injured persons taken home..... | 69 |
| Sick and injured persons taken to station..... | 3 |
| Dead bodies taken to morgue..... | 16 |
| Dead bodies taken to residence..... | |
| Disturbances suppressed without arrests..... | 18 |
| Insane persons cared for..... | 21 |
| Destitute persons cared for..... | 13 |
| Prisoners taken to county jail..... | 4 |
| Prisoners taken to Division Police Court..... | 417 |
| Packages stolen property recovered..... | 17 |
| Lost children taken to parents..... | 48 |
| Mad or crippled animals killed..... | 2 |
| Runaway horses overtaken and stopped..... | |
| Stolen horses recovered..... | 8 |
| Stolen vehicles recovered..... | 4 |
| Abandoned children taken to Foundling's Home..... | 3 |
| Persons rescued from drowning..... | 1 |
| Inebriates taken to Washingtonian Home..... | 19 |
| Persons taken to the House of Good Shepherd..... | 9 |
| Persons taken to the Home of the Friendless..... | |
| Persons taken to Erring Woman's Refuge..... | 1 |
| Persons taken to St. Vincent's Orphan Asylum..... | |
| Persons taken to St. Joseph's Orphan Asylum..... | |
| Persons taken to County Agent..... | 2 |
| Miscellaneous and incidental..... | 306 |

THIRTIETH PRECINCT.

| | |
|---|---------|
| Reports received from policemen in district..... | 110,059 |
| Alarms responded to..... | 539 |
| Arrests made..... | 123 |
| Fires attended | 54 |
| Miles traveled..... | 2,943½ |
| False alarms..... | 14 |
| Sick and injured persons taken to hospital..... | 40 |
| Sick and injured persons taken home..... | 43 |
| Sick and injured persons taken to station..... | 13 |
| Dead bodies taken to morgue..... | 13 |
| Dead bodies taken to residence..... | 1 |
| Disturbances suppressed without arrests..... | 19 |
| Insane persons cared for..... | 8 |
| Destitute persons cared for..... | 3 |
| Prisoners taken to county jail..... | 13 |
| Prisoners taken to Division Police Court..... | 86 |
| Packages stolen property recovered | 13 |
| Lost children taken to parents..... | 8 |
| Mad or crippled animals killed..... | 9 |
| Runaway horses overtaken and stopped..... | 2 |
| Stolen horses recovered..... | 1 |
| Stolen vehicles recovered..... | 1 |
| Abandoned children taken to Foundling's Home..... | |
| Persons rescued from drowning..... | |
| Inebriates taken to Washingtonian Home | |
| Persons taken to the House of Good Shepherd | |
| Persons taken to the Home of the Friendless..... | |
| Persons taken to Erring Woman's Refuge..... | |
| Persons taken to St. Vincent's Orphan Asylum..... | |
| Persons taken to St. Joseph's Orphan Asylum | |
| Persons taken to County Agent..... | |
| Miscellaneous and incidental..... | 174 |

THIRTY-FIRST PRECINCT.

(Not Opened.)

THIRTY-SECOND PRECINCT.

| | |
|---|---------------------|
| Reports received from policemen in district..... | 175,549 |
| Alarms responded to..... | 2,468 |
| Arrests made..... | 1,908 |
| Fires attended..... | 198 |
| Miles traveled..... | 6,235 $\frac{1}{2}$ |
| False alarms..... | 25 |
| Sick and injured persons taken to hospital..... | 101 |
| Sick and injured persons taken home..... | 33 |
| Sick and injured persons taken to station..... | 6 |
| Dead bodies taken to morgue..... | 16 |
| Dead bodies taken to residence..... | 2 |
| Disturbances suppressed without arrests..... | 134 |
| Insane persons cared for..... | 7 |
| Destitute persons cared for..... | 5 |
| Prisoners taken to county jail..... | 646 |
| Prisoners taken to Division Police Court..... | 303 |
| Packages stolen property recovered..... | 23 |
| Lost children taken to parents..... | 22 |
| Mad or crippled animals killed..... | |
| Runaway horses overtaken and stopped..... | 1 |
| Stolen horses recovered..... | 2 |
| Stolen vehicles recovered..... | 6 |
| Abandoned children taken to Foundling's Home..... | 3 |
| Persons rescued from drowning..... | |
| Inebriates taken to Washingtonian Home..... | 4 |
| Persons taken to the House of Good Shepherd..... | 5 |
| Persons taken to the Home of the Friendless..... | |
| Persons taken to Erring Woman's Refuge..... | |
| Persons taken to St. Vincent's Orphan Asylum..... | |
| Persons taken to St. Joseph's Orphan Asylum..... | |
| Persons taken to County Agent..... | 18 |
| Miscellaneous and incidental..... | 739 |

THIRTY-THIRD PRECINCT.

| | |
|---|---------|
| Reports received from policemen in district..... | 104,394 |
| Alarms responded to..... | 1,952 |
| Arrests made..... | 1,067 |
| Fires attended..... | 160 |
| Miles traveled..... | 6,154½ |
| False alarms..... | 18 |
| Sick and injured persons taken to hospital..... | 98 |
| Sick and injured persons taken home..... | 44 |
| Sick and injured persons taken to station..... | 6 |
| Dead bodies taken to morgue..... | 20 |
| Dead bodies taken to residence..... | 1 |
| Disturbances suppressed without arrests..... | 143 |
| Insane persons cared for..... | 25 |
| Destitute persons cared for..... | 18 |
| Prisoners taken to county jail..... | 99 |
| Prisoners taken to Division Police Court..... | 863 |
| Packages stolen property recovered..... | 8 |
| Lost children taken to parents..... | 53 |
| Mad or crippled animals killed..... | 115 |
| Runaway horses overtaken and stopped..... | 2 |
| Stolen horses recovered..... | 5 |
| Stolen vehicles recovered..... | 3 |
| Abandoned children taken to Foundling's Home..... | 3 |
| Persons rescued from drowning..... | |
| Inebriates taken to Washingtonian Home..... | |
| Persons taken to the House of Good Shepherd..... | 1 |
| Persons taken to the Home of the Friendless..... | |
| Persons taken to Erring Woman's Refuge..... | |
| Persons taken to St. Vincent's Orphan Asylum..... | |
| Persons taken to St. Joseph's Orphan Asylum..... | |
| Persons taken to County Agent..... | 9 |
| Miscellaneous and incidental..... | 345 |

THIRTY-FOURTH PRECINCT.

| | |
|---|---------|
| Reports received from policemen in district..... | 119,250 |
| Alarms responded to..... | 1,136 |
| Arrests made..... | 428 |
| Fires attended..... | 115 |
| Miles traveled..... | 5,055 |
| False alarms..... | 24 |
| Sick and injured persons taken to hospital..... | 85 |
| Sick and injured persons taken home..... | 96 |
| Sick and injured persons taken to station..... | 9 |
| Dead bodies taken to morgue..... | 23 |
| Dead bodies taken to residence..... | |
| Disturbances suppressed without arrests..... | 100 |
| Insane persons cared for..... | 34 |
| Destitute persons cared for..... | 14 |
| Prisoners taken to county jail..... | 55 |
| Prisoners taken to Division Police Court..... | 180 |
| Packages stolen property recovered..... | 15 |
| Lost children taken to parents..... | 14 |
| Mad or crippled animals killed..... | |
| Runaway horses overtaken and stopped..... | |
| Stolen horses recovered..... | |
| Stolen vehicles recovered..... | 1 |
| Abandoned children taken to Foundling's Home..... | 4 |
| Persons rescued from drowning..... | |
| Inebriates taken to Washingtonian Home..... | 2 |
| Persons taken to the House of Good Shepherd..... | |
| Persons taken to the Home of the Friendless..... | |
| Persons taken to Erring Woman's Refuge..... | 3 |
| Persons taken to St. Vincent's Orphan Asylum..... | |
| Persons taken to St. Joseph's Orphan Asylum..... | |
| Persons taken to County Agent..... | 1 |
| Miscellaneous and incidental..... | 234 |

THIRTY-FIFTH PRECINCT.

| | |
|---|---------|
| Reports received from policemen in district... | 110,451 |
| Alarms responded to | 1,077 |
| Arrests made..... | 221 |
| Fires attended..... | 57 |
| Miles traveled..... | 4,518 |
| False alarms..... | 19 |
| Sick and injured persons taken to hospital..... | 40 |
| Sick and injured persons taken home..... | 41 |
| Sick and injured persons taken to station..... | 9 |
| Dead bodies taken to morgue | 1 |
| Dead bodies taken to residence..... | 1 |
| Disturbances suppressed without arrests..... | 66 |
| Insane persons cared for..... | 17 |
| Destitute persons cared for..... | 12 |
| Prisoners taken to county jail..... | 19 |
| Prisoners taken to Division Police Court..... | 223 |
| Packages stolen property recovered..... | |
| Lost children taken to parents..... | 35 |
| Mad or crippled animals killed..... | |
| Runaway horses overtaken and stopped..... | 2 |
| Stolen horses recovered..... | |
| Stolen vehicles recovered..... | |
| Abandoned children taken to Foundling's Home..... | |
| Persons rescued from drowning..... | |
| Inebriates taken to Washingtonian Home..... | |
| Persons taken to the House of Good Shepherd..... | |
| Persons taken to the Home of the Friendless..... | |
| Persons taken to Erring Women's Refuge..... | |
| Persons taken to St. Vincent's Orphan Asylum..... | |
| Persons taken to St. Joseph's Orphan Asylum..... | |
| Persons taken to County Agent..... | 3 |
| Miscellaneous and incidental..... | 421 |

THIRTY-SIXTH PRECINCT.

| | |
|--|--------|
| Reports received from policemen in district..... | 48,716 |
| Alarms responded to..... | 374 |
| Arrests made..... | 71 |
| Fires attended..... | 29 |
| Miles traveled..... | 2,780½ |
| False alarms..... | 10 |
| Sick and injured persons taken to hospital..... | 24 |
| Sick and injured persons taken home..... | 20 |
| Sick and injured persons taken to station | 5 |
| Dead bodies taken to morgue..... | 5 |
| Dead bodies taken to residence..... | 1 |
| Disturbances suppressed without arrests..... | 26 |
| Insane persons cared for..... | 21 |
| Destitute persons cared for..... | 12 |
| Prisoners taken to county jail..... | 1 |
| Prisoners taken to Division Police Court..... | 61 |
| Packages stolen property recovered..... | 5 |
| Lost children taken to parents..... | 14 |
| Mad or crippled animals killed..... | |
| Runaway horses overtaken and stopped..... | 4 |
| Stolen horses recovered | 6 |
| Stolen vehicles recovered..... | 6 |
| Abandoned children taken to Foundling's Home..... | |
| Persons rescued from drowning..... | |
| Inebriates taken to Washingtonian Home..... | |
| Persons taken to the House of Good Shepherd..... | |
| Persons taken to the Home of the Friendless..... | |
| Persons taken to Erring Woman's Refuge..... | |
| Persons taken to St. Vincent's Orphan Asylum | |
| Persons taken to St. Joseph's Orphan Asylum..... | |
| Persons taken to County Agent..... | |
| Miscellaneous and incidental..... | 99 |

THIRTY-SEVENTH PRECINCT.

| | |
|---|--------|
| Reports received from policemen in district..... | 24,269 |
| Alarms responded to | |
| Arrests made..... | 8 |
| Fires attended..... | 1 |
| Miles traveled..... | |
| False alarms..... | |
| Sick and injured persons taken to hospital..... | |
| Sick and injured persons taken home..... | |
| Sick and injured persons taken to station..... | |
| Dead bodies taken to morgue | |
| Dead bodies taken to residence..... | |
| Disturbances suppressed without arrests..... | |
| Insane persons cared for..... | |
| Destitute persons cared for..... | |
| Prisoners taken to county jail..... | |
| Prisoners taken to Division Police Court..... | 5 |
| Packages stolen property recovered..... | |
| Lost children taken to parents..... | |
| Mad or crippled animals killed..... | |
| Runaway horses overtaken and stopped..... | |
| Stolen horses recovered..... | |
| Stolen vehicles recovered..... | |
| Abandoned children taken to Foundling's Home..... | |
| Persons rescued from drowning..... | |
| Inebriates taken to Washingtonian Home..... | |
| Persons taken to the House of Good Shepherd..... | |
| Persons taken to the Home of the Friendless..... | |
| Persons taken to Erring Women's Refuge..... | |
| Persons taken to St. Vincent's Orphan Asylum..... | |
| Persons taken to St. Joseph's Orphan Asylum..... | |
| Persons taken to County Agent..... | |
| Miscellaneous and incidental..... | |

THIRTY-EIGHTH PRECINCT.

| | |
|---|---------|
| Reports received from policemen in district..... | 190,098 |
| Alarms responded to..... | 2,725 |
| Arrests made..... | 2,086 |
| Fires attended..... | 189 |
| Miles traveled..... | 5,734 |
| False alarms..... | 96 |
| Sick and injured persons taken to hospital..... | 154 |
| Sick and injured persons taken home..... | 32 |
| Sick and injured persons taken to station..... | 19 |
| Dead bodies taken to morgue..... | 49 |
| Dead bodies taken to residence..... | 2 |
| Disturbances suppressed without arrests..... | 168 |
| Insane persons cared for..... | 49 |
| Destitute persons cared for..... | 16 |
| Prisoners taken to county jail..... | 354 |
| Prisoners taken to Division Police Court..... | 230 |
| Packages stolen property recovered..... | 31 |
| Lost children taken to parents..... | 60 |
| Mad or crippled animals killed..... | |
| Runaway horses overtaken and stopped..... | |
| Stolen horses recovered..... | 1 |
| Stolen vehicles recovered..... | |
| Abandoned children taken to Foundling's Home..... | 1 |
| Persons rescued from drowning..... | 10 |
| Inebriates taken to Washingtonian Home..... | 2 |
| Persons taken to the House of Good Shepherd..... | 4 |
| Persons taken to the Home of the Friendless..... | 4 |
| Persons taken to Erring Woman's Refuge..... | |
| Persons taken to St. Vincent's Orphan Asylum..... | |
| Persons taken to St. Joseph's Orphan Asylum..... | |
| Persons taken to County Agent..... | 24 |
| Miscellaneous and incidental..... | 553 |

THIRTY-NINTH PRECINCT.

| | |
|---|---------|
| Reports received from policemen in district..... | 142,058 |
| Alarms responded to..... | 1,256 |
| Arrests made..... | 618 |
| Fires attended..... | 88 |
| Miles traveled..... | 2,745 |
| False alarms..... | 59 |
| Sick and injured persons taken to hospital | 96 |
| Sick and injured persons taken home..... | 48 |
| Sick and injured persons taken to station. | 15 |
| Dead bodies taken to morgue..... | 25 |
| Dead bodies taken to residence..... | 1 |
| Disturbances suppressed without arrests..... | 89 |
| Insane persons cared for..... | 37 |
| Destitute persons cared for..... | 13 |
| Prisoners taken to county jail.. | 9 |
| Prisoners taken to Division Police Court..... | 177 |
| Packages stolen property recovered..... | |
| Lost children taken to parents..... | 45 |
| Mad or crippled animals killed..... | |
| Runaway horses overtaken and stopped..... | |
| Stolen horses recovered..... | |
| Stolen vehicles recovered..... | 1 |
| Abandoned children taken to Foundling's Home..... | |
| Persons rescued from drowning..... | |
| Inebriates taken to Washingtonian Home..... | 3 |
| Persons taken to the House of Good Shepherd..... | |
| Persons taken to the Home of the Friendless..... | |
| Persons taken to the Erring Woman's Refuge | |
| Persons taken to St. Vincent's Orphan Asylum..... | |
| Persons taken to St. Joseph's Orphan Asylum..... | |
| Persons taken to County Agent..... | 6 |
| Miscellaneous and incidental..... | 302 |

FORTIETH PRECINCT.

| | |
|---|---------|
| Reports received from policemen in district..... | 106,060 |
| Alarms responded to..... | 987 |
| Arrests made..... | 421 |
| Fires attended..... | 97 |
| Miles traveled..... | 4,473 |
| False alarms..... | 19 |
| Sick and injured persons taken to hospital..... | 94 |
| Sick and injured persons taken home..... | 43 |
| Sick and injured persons taken to station..... | 4 |
| Dead bodies taken to morgue..... | 25 |
| Dead bodies taken to residence..... | 1 |
| Disturbances suppressed without arrests..... | 82 |
| Insane persons cared for..... | 21 |
| Destitute persons cared for..... | 3 |
| Prisoners taken to county jail..... | |
| Prisoners taken to Division Police Court..... | 232 |
| Packages stolen property recovered..... | 10 |
| Lost children taken to parents..... | 30 |
| Mad or crippled animals killed..... | |
| Runaway horses overtaken and stopped..... | |
| Stolen horses recovered..... | |
| Stolen vehicles recovered..... | 4 |
| Abandoned children taken to Foundling's Home..... | 2 |
| Persons rescued from drowning..... | |
| Inebriates taken to Washingtonian Home..... | |
| Persons taken to the House of Good Shepherd..... | 2 |
| Persons taken to the Home of the Friendless..... | |
| Persons taken to the Erring Woman's Refuge..... | 2 |
| Persons taken to St. Vincent's Orphan Asylum..... | |
| Persons taken to St. Joseph's Orphan Asylum..... | |
| Persons taken to County Agent..... | |
| Miscellaneous and incidental..... | 209 |

FORTY-FIRST PRECINCT.

| | |
|---|--------|
| Reports received from policemen in district..... | 95,522 |
| Alarms responded to..... | 1,196 |
| Arrests made..... | 607 |
| Fires attended..... | 102 |
| Miles traveled..... | 4,872½ |
| False alarms..... | 30 |
| Sick and injured persons taken to hospital..... | 91 |
| Sick and injured persons taken home..... | 78 |
| Sick and injured persons taken to station..... | 10 |
| Dead bodies taken to morgue..... | 13 |
| Dead bodies taken to residence..... | 7 |
| Disturbances suppressed without arrests..... | 100 |
| Insane persons cared for..... | 14 |
| Destitute persons cared for..... | 34 |
| Prisoners taken to county jail..... | 83 |
| Prisoners taken to Division Police Court..... | 97 |
| Packages stolen property recovered..... | 9 |
| Lost children taken to parents..... | 29 |
| Mad or crippled animals killed..... | 2 |
| Runaway horses overtaken and stopped..... | |
| Stolen horses recovered..... | |
| Stolen vehicles recovered..... | |
| Abandoned children taken to Foundling's Home..... | 2 |
| Persons rescued from drowning..... | |
| Inebriates taken to Washingtonian Home..... | 1 |
| Persons taken to the House of Good Shepherd.... | |
| Persons taken to the Home of the Friendless..... | |
| Persons taken to Erring Woman's Refuge..... | |
| Persons taken to St. Vincent's Orphan Asylum..... | |
| Persons taken to St. Joseph's Orphan Asylum..... | |
| Persons taken to County Agent..... | |
| Miscellaneous and incidental..... | 283 |

FORTY-SECOND PRECINCT.

| | |
|---|--------|
| Reports received from policemen in district..... | 62,828 |
| Alarms responded to..... | 874 |
| Arrests made..... | 257 |
| Fires attended..... | 55 |
| Miles traveled..... | 3,829½ |
| False alarms..... | 13 |
| Sick and injured persons taken to hospital..... | 56 |
| Sick and injured persons taken home..... | 50 |
| Sick and injured persons taken to station..... | 11 |
| Dead bodies taken to morgue..... | 14 |
| Dead bodies taken to residence..... | |
| Disturbances suppressed without arrests..... | 52 |
| Insane persons cared for..... | 9 |
| Destitute persons cared for..... | 5 |
| Prisoners taken to county jail..... | 26 |
| Prisoners taken to Division Police Court..... | 193 |
| Packages stolen property recovered..... | 3 |
| Lost children taken to parents..... | 27 |
| Mad or crippled animals killed..... | 4 |
| Runaway horses overtaken and stopped..... | |
| Stolen horses recovered..... | 1 |
| Stolen vehicles recovered..... | 1 |
| Abandoned children taken to Foundling's Home..... | 1 |
| Persons rescued from drowning..... | 1 |
| Inebriates taken to Washingtonian Home..... | 3 |
| Persons taken to the House of Good Shepherd..... | |
| Persons taken to the Home of the Friendless..... | |
| Persons taken to Erring Woman's Refuge..... | |
| Persons taken to St. Vincent's Orphan Asylum..... | |
| Persons taken to St. Joseph's Orphan Asylum..... | |
| Persons taken to County Agent..... | 1 |
| Miscellaneous and incidental..... | 223 |

FORTY-THIRD PRECINCT.

| | |
|---|--------|
| Reports received from policemen in district..... | 50,529 |
| Alarms responded to..... | 412 |
| Arrests made..... | 170 |
| Fires attended..... | 26 |
| Miles traveled..... | 2,830 |
| False alarms..... | 3 |
| Sick and injured persons taken to hospital | 26 |
| Sick and injured persons taken home..... | 20 |
| Sick and injured persons taken to station. | 9 |
| Dead bodies taken to morgue..... | 6 |
| Dead bodies taken to residence..... | |
| Disturbances suppressed without arrests..... | 22 |
| Insane persons cared for..... | 3 |
| Destitute persons cared for..... | 6 |
| Prisoners taken to county jail. | 84 |
| Prisoners taken to Division Police Court..... | 119 |
| Packages stolen property recovered..... | 2 |
| Lost children taken to parents..... | 12 |
| Mad or crippled animals killed..... | 3 |
| Runaway horses overtaken and stopped..... | |
| Stolen horses recovered..... | 1 |
| Stolen vehicles recovered..... | 1 |
| Abandoned children taken to Foundling's Home..... | |
| Persons rescued from drowning..... | |
| Inebriates taken to Washingtonian Home..... | |
| Persons taken to the House of Good Shepherd..... | |
| Persons taken to the Home of the Friendless..... | |
| Persons taken to the Erring Woman's Refuge..... | |
| Persons taken to St. Vincent's Orphan Asylum..... | |
| Persons taken to St. Joseph's Orphan Asylum..... | |
| Persons taken to County Agent..... | |
| Miscellaneous and incidental..... | 116 |

FORTY-FOURTH PRECINCT.

(Not Boxes.)

MISCELLANEOUS DUTIES PERFORMED BY THE POLICE.

| NATURE OF DUTIES. | 1896 | 1895 | 1894 | 1893 | 1892 |
|---|--------|--------|--------|--------|--------|
| Number of lost children found and re- stored to parents..... | 3818 | 3750 | 3865 | 4174 | 4692 |
| Number of lodgers accommodated... | 176980 | 130481 | 133006 | 88138 | 77085 |
| Number of meals furnished prisoners and lodgers..... | 140396 | 117375 | 136685 | 140760 | 221743 |
| Number of accidents reported..... | 6432 | 4939 | 4927 | 6029 | 3812 |
| Number of attempted suicides reported | 341 | 268 | 289 | 319 | 238 |
| Number of buildings found open and unsecured..... | 460 | 607 | 639 | 549 | 489 |
| Number of burglaries frustrated..... | 323 | 369 | 377 | 407 | 269 |
| Number of dead bodies found..... | 406 | 381 | 416 | 548 | 386 |
| Number of defective drains and vaults reported..... | 409 | 617 | 377 | 564 | 598 |
| Number of defective fire alarm boxes reported..... | 46 | 96 | 79 | 45 | 36 |
| Number of defective gas pipes reported | 311 | 300 | 227 | 354 | 156 |
| Number of defective hydrants reported | 584 | 625 | 847 | 676 | 309 |
| Number of defective waterpipes report'd | 1017 | 1333 | 1142 | 1411 | 682 |
| Number of defective sewers and catch basins reported..... | 1165 | 1522 | 1073 | 1247 | 863 |
| Number of defective culverts reported. | 927 | 1022 | 4103 | 1080 | 557 |
| Number of defective sidewalks reported | 28947 | 59428 | 15471 | 16432 | 17112 |
| Number of disturbances suppressed... | 2152 | 2521 | 2591 | 3049 | 3883 |
| Number of fire alarms given. | 3395 | 3769 | 2262 | 2376 | 1717 |
| Number of fires extinguished without alarms..... | 321 | 327 | 397 | 308 | 335 |
| Number of intoxicated persons assisted home..... | 718 | 991 | 1784 | 1539 | 2078 |
| Number of nuisances and dead animals reported..... | 20258 | 18335 | 20093 | 20130 | 20537 |
| Number of notices served on property owners to repair sidewalks..... | 109 | 225 | 441 | 166 | 242 |
| Number of persons rescued from drown- ing..... | 42 | 163 | 128 | 77 | 60 |
| Number of sick and injured persons assisted..... | 6164 | 7684 | 5521 | 5660 | 3869 |
| Number of stray teams taken up..... | 1092 | 1433 | 1550 | 1906 | 1723 |
| Number of sudden deaths reported.... | 435 | 504 | 563 | 646 | 573 |
| Number of suicides reported..... | 354 | 448 | 540 | 377 | 343 |
| Number of broken street lamps reported | 12372 | 4455 | 4207 | 3772 | 2671 |
| Number of street lamps reported not lighted..... | 2955 | 35631 | 29505 | 32757 | 33495 |
| Number of violations of building ordi- nances reported. | 1776 | 1021 | 1131 | 1184 | 1102 |
| Number of times waste of water report'd | 384 | 667 | 413 | 1097 | 262 |
| Number of abandoned infants found... | 10 | ..... | 6 | 31 | 22 |
| Number of policemen injured in dis- charge of duty..... | 91 | 86 | 93 | 105 | 94 |
| Number of women and children cared for by matrons..... | 28642 | 17180 | 15665 | 20159 | 17911 |
| Number of deaths in police force..... | 12 | 25 | 26 | 27 | ..... |

AMBULANCE SERVICE.

The following is a statement of the services by the Ambulance Wagons during the year 1896.

| | |
|--|--------|
| Alarms responded to..... | 6,834 |
| Arrests made..... | 210 |
| Fires attended..... | 14 |
| Miles traveled..... | 48,278 |
| Causeless alarms..... | 152 |
| Sick and injured persons taken to hospital..... | 4,639 |
| Sick and injured persons taken home..... | 941 |
| Sick and injured persons taken to station and cared for..... | 162 |
| Dead bodies taken to morgue..... | 61 |
| Dead bodies taken to residence..... | 46 |
| Insane persons cared for..... | 25 |
| Destitute persons cared for..... | |
| Prisoners taken to county jail..... | 16 |
| Abandoned children taken to Foundling's Home..... | 5 |
| Inebriates taken to Washingtonian Home..... | 2 |
| Wayward girls taken to the Home of the Good Shepherd..... | |
| Destitute children taken to St. Vincent's Orphan Asylum..... | |
| Destitute persons taken to County Agent..... | 2 |
| Miscellaneous and incidental runs..... | 604 |
| Persons rescued from drowning..... | 2 |
| Lost children taken home..... | 2 |

DEPARTMENT OF POLICE.

CHIEF MATRON'S REPORT FOR 1896.

[illegible]

FUGITIVES FROM JUSTICE.

Arrested in Chicago and turned over to Officers from other Cities, for the Year 1896.

| Date. | Name of Fugitive. | Crime. | Officers Making Arrest. | Turned over to Authorities of |
|-------|-----------------------------|---------------------------------|-------------------------|-------------------------------|
| July | 11. Allabaugh, Frank M... | Ob. money by false pretenses. | Cowdrey and Buckminster | Galesburg, Ill. |
| Nov. | 12. Allger, August | Escaped prisoner. | McCarthy and Howard | Cincinnati, O. |
| Dec. | 17. Adams, Charles | Viol. Sec. 155, Chap. 38, R. S. | Munnane and Thorpe | Elgin, Ill. |
| Mar. | 4. Brady, Charles | Burglary | Keefe and Theime | Dixon, Ill. |
| April | 8. Bausermer, H. | Forgery | Haerle and Strum | New York |
| May | 2. Brewer, J. H. | Larceny | O'Neill and Spain | St. Louis, Mo. |
| June | 23. Brown, Mart L. | Ob. money by false pretenses. | Amstein and Fitzgerald | Boston, Mass. |
| July | 23. Bloch, Sam. | Selling goods by false pretense | Hartford and Tierney | Joliet, Ill. |
| Nov. | 3. Barton, W. R. | Larceny. | Leonard and Breen. | Williams Co., O. |
| Nov. | 10. Bennett, Ed. T. | Embezzlement. | Fitzgerald and Hartford | Bay City, Mich. |
| Nov. | 16. Birch, Barney | Larceny | Hanley and Spain | Philadelphia, Pa. |
| Dec. | 5. Bierch, William | Burglary | Edward Maher | Earlville, Ill. |
| Dec. | 17. Burno, Henry | Viol. Sec. 155, Chap. 38, R. S. | Munnane and Thorpe | Elgin, Ill. |
| Jan. | 3. Campbell, J. R., alias. | Forgery | Haerle and Strum | Pittsburg, Pa. |
| Feb. | 14. Cohen, Harry | Burglary | Stible and Marks | Milwaukee, Wis. |
| May | 18. Clair, Lulu Belle | Larceny | H. S. Johnston | Grand Rapids, Mich. |
| June | 26. Crawford, Ike | Larceny | Chas. Lagergren | Hammond, Ind. |
| July | 25. Clark, George H. | Embezzlement. | Farnsworth and Sullivan | Peoria, Ill. |
| Sept. | 26. Cook, Fred S. | Embezzlement. | Howard and McCarthy | Springfield, Ill. |
| Dec. | 21. Carler, James | Burglary and Larceny | Hamilton and Puelan | Joliet, Ill. |
| Dec. | 25. Considine, Jos., alias. | Burglary | Lieut. Thomas | Gansville, O. |
| Jan. | 29. Dunworthy, Chas | Robbery | McNamara and Fitzgerald | Milwaukee, Wis. |
| Mar. | 1. Dally, Michael | Larceny (H. S.) | W. F. Stein | Moody Co., S. D. |
| June | 21. Depew, Charles H. | Forgery (nine charges) | Enright and Brown | Hammond, Ind. |
| June | 22. Decker, Harry S. | Forgery | Taylor and Jones | Peoria, Ill. |
| July | 1. Dewey, W. E. | Larceny | Trehorn and Flynn | Pontiac, Ill. |
| July | 6. Dickerson, William | Burglary and Larceny | Magner and Weber. | Springfield, Ill. |

FUGITIVES FROM JUSTICE.—Continued.

| Date. | Name of Fugitive. | Crime. | Officers Making Arrest. | Turned over to Authorities of |
|-----------|------------------------------|---------------------------------|------------------------------|-------------------------------|
| July 8. | Dorman, Walter, alias. | Escaped State Reformatory .. | Johnson and Brown..... | Pontiac, Ill. |
| Aug. 12. | Diel, William | Burglary and Larceny | Strum and Webber..... | Shelbyville, Mo. |
| Aug. 18. | Duncan, Joseph..... | Passing raised bills..... | Strum and Webber..... | Milwaukee, Wis. |
| Aug. 29. | Dentes, John..... | Murder..... | DeRoche and Marks..... | Medford, Wis. |
| Dec. 31. | Durfran, Jacob..... | Embezzlement..... | Howard and McCarthy..... | Kenosha, Wis. |
| Mar. 8. | Emery, H. W..... | Larceny..... | Thomas and Gardner..... | Laporte, Ind. |
| Jan. 3. | Easterly, Orlando, alias. | Robbery and Assault..... | Trehorn and Flynn..... | Hastings, Mich. |
| Mar. 21. | Eals, Mrs. Sarah..... | Forgery..... | Farnsworth and Sullivan..... | Eaton, O. |
| Aug. 20. | Epley, Charles..... | Burglary..... | Elliott and Flynn..... | St. Joseph, Mich. |
| Sept. 13. | Engstrom, Anton..... | Larceny..... | Cudmore and O'Rourke..... | Elgin, Ill. |
| Oct. 5. | Emerlich, John, alias..... | Larceny..... | Kelly and Kisselburg..... | Naperville, Ill. |
| Oct. 5. | Emerlich, Martha, alias..... | Larceny..... | Kelly and Kisselburg..... | Naperville, Ill. |
| Jan. 14. | Friedman, Louis..... | Ob. property by F. P..... | Ashby and Freeman..... | Cambridge, Ill. |
| June 23. | Futterisib, Fritz..... | Burglary and jail breaking..... | O'Neill and Spain..... | South Omaha, Neb. |
| July 31. | Fink, William..... | Forgery..... | Kelly and Kisselburg..... | Dillsburg, Pa. |
| Aug. 3. | Fisher, David..... | Burglary..... | Hamilton and Phelan..... | Liberty, Ill. |
| Oct. 10. | Fuller, Jennie..... | Larceny..... | Hamley and Spain..... | Peoria, Ill. |
| Nov. 7. | Fisher, Charles..... | Abandonment..... | DeRoche and Marks..... | Harvard, Ill. |
| Nov. 28. | Freeman, Henry W. . . | Passing forged checks..... | McWeeny and Magnus..... | Milwaukee, Wis. |
| Feb. 6. | Graf, George..... | Larceny..... | Stible and Marks..... | Milwaukee, Wis. |
| Sept. 25. | Grimes, Sumner..... | Larceny..... | Conick and Sweig..... | Milwaukee, Wis. |
| Nov. 7. | Gagel, William..... | Murder..... | Norton, Weber, Tobin & Smith | St. Louis, Mo. |
| Nov. 14. | Guentzel, Richard..... | Burglary and Larceny..... | Wallbaum and Sederberg..... | Austin, Ill. |
| Mar. 29. | Hanson, R. E..... | Embezzlement..... | Norton and Smith..... | Decatur, Ill. |
| Mar. 29. | Hartwell, Chas. O..... | Forgery and embezzlement..... | P. S. O'Connell..... | Buffalo, N. Y. |
| July 4. | Hughes, Isaac, colored. | Larceny..... | Freeman and Gard..... | Terre Haute, Ind. |
| Sept. 4. | Hindman, Isaiah..... | Embezzlement..... | DeRoche and Marks..... | Baltimore, Md. |
| Oct. 28. | Houlihan, Richard..... | Larceny..... | Plunkett and Burke..... | New York. |
| Nov. 18. | Hale, Charles..... | Burglary..... | Burns and Fitzgerald..... | Ft. Wayne, Ind. |
| Nov. 30. | Hardy, E. S..... | Larceny..... | Farnsworth and Johnson..... | Pittsburg, Pa. |
| Dec. 22. | Halleron, John..... | Larceny and rec. stol. prop... | Hamilton and Phelan..... | Waukegan, Ill. |

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|-------|-----|-------------------------|--------------------------------|--------------------------|----------------------|
| Jan. | 27. | Johnson, T. H. | Larceny | Tripp and Freeman. | Lima, O. |
| Feb. | 6. | Jungman, Louis | Embezzlement | Stible and Marks. | Milwaukee, Wis. |
| Feb. | 20. | Jackson, Tracey, alias. | Murder. | Howard and Fitzpatrick. | Columbus, O. |
| April | 20. | Johnson, Olaf. | Forgery | Bock and McCarthy. | Webster City, Iowa. |
| June | 28. | Judge, Lawrence. | Burglary. | Conick and Sweig. | Cincinnati, O. |
| July | 21. | Johanson, S. L. | Seduction. | Johnson and DeRoche. | Burlington, Iowa. |
| Oct. | 6. | Johnson, Frank. | Burglary. | Hogan and Wessler. | Ottawa, Ill. |
| Oct. | 8. | Jennings, Martin. | Larceny. | Howard and McCarthy. | Naperville, Ill. |
| Oct. | 24. | Jones, Ebinger. | Larceny. | M. J. Gallagher. | Waukegan, Ill. |
| Mar. | 11. | Knickerbocker, Herman | Larceny. | Mahoney and Weisse. | Naperville, Ill. |
| Sept. | 3. | Kastner, Rudolph | Larceny. | Plunkett and Burke. | East St. Louis, Ill. |
| Sept. | 22. | Keil, Mary. | Larceny. | Howard and McCarthy. | Milwaukee, Wis. |
| Sept. | 29. | Kenney, John | Larceny. | Fitzgerald and Hartford. | Milwaukee, Wis. |
| Oct. | 16. | Koerner, Morris | Ob. goods by F. P. | Minier and Leyden. | Cleveland, O. |
| Nov. | 2. | Kelly, Thomas. | Larceny (H. S.) | James Scully. | Knox, Ind. |
| Dec. | 19. | Kennedy, Eldridge col'd | Murder. | O'Neill and Farnsworth. | Louisville, Ky. |
| Mar. | 12. | Liedloff, Elmer, alias. | Robbery. | Farnsworth and Strum. | Mankato, Minn. |
| May | 12. | Lewis, Flora. | Perjury. | Farnsworth and DeRoche. | Kalamazoo, Mich. |
| May | 28. | La Rutsch, John, alias. | Murder. | Tierney and Fitzpatrick. | Buffalo, N. Y. |
| June | 11. | Le Vinn, Louis P. | Forgery and ob. money by F. P. | Flynn and Trehorn. | St. Joseph, Mich. |
| June | 18. | Lynch, Frank, alias. | Larceny (H. S.) | Henderson and Curtin. | Newark, N. J. |
| Nov. | 2. | Losier, William. | Larceny as bailee. | James Scully. | Knox, Ind. |
| Dec. | 21. | Lozier, George. | Attempted murder. | Kelly and Kisselburg. | Summit, Ill. |
| Jan. | 31. | Maynard, William. | Assault to kill. | Haerle and Strum. | Ionia, Mich. |
| Jan. | 31. | Morris, Emanuel. | Larceny. | Thomas Lynch. | Hammond, Ind. |
| Feb. | 6. | Mostek, George. | Rape. | Hartford and Tierney. | Columbus, Neb. |
| Mar. | 9. | Murphy, Harry, alias. | Larceny. | Duffy and Ullmacher. | Baraboo, Wis. |
| May | 18. | McGowan, John. | Larceny. | H. S. Johnston. | Grand Rapids, Mich. |
| June | 17. | Mengen, Leonard. | Larceny. | Stible and Burke. | Joliet, Ill. |
| June | 17. | Marx, George, alias. | Abandonment. | McWeeny and Magnus. | Juneau, Wis. |
| July | 11. | McGurn, William. | Burglary. | B. Flynn. | Duluth, Minn. |
| July | 17. | McGurn, William. | Burglary. | Frederick Moritz. | Duluth, Minn. |
| Aug. | 7. | Mills, William. | Highway robbery. | Bock and Fitzpatrick. | Manistee, Mich. |
| Aug. | 20. | Miller, Frank. | Burglary and jail breaking. | DeRoche and Marks. | Kenosha, Wis. |
| Sept. | 2. | Mocker, Albert. | Forgery. | M. S. Finegan. | Fort Dodge, Ia. |
| Oct. | 14. | Moskowitz, Joseph J. | Abandonment. | King and Duffy. | Boston, Mass. |

FUGITIVES FROM JUSTICE.—Continued.

| Date. | Name of Fugitive. | Crime. | Officers Making Arrest. | Turned over to Authorities of |
|-----------|---------------------------|---------------------------------|--------------------------------|-------------------------------|
| Nov. 27. | Munks, William G. | Accessory to forgery. | McWeeney and Magnus. | Bay City, Mich. |
| Dec. 22. | Martin, William. | Larceny and rec. stolen prop. | Hamilton and Phelan. | Waukegan, Ill. |
| Jan. 11. | Ochs, Jacques. | Ob. money by F. P. | Flynn and Trehorn. | New York. |
| Apr. 1. | O'Leary, James. | Prize fighting. | Schelin and Murdock. | Crown Point, Ind. |
| Feb. 1. | Palmeyer, W. | Indecent exposure. | Tripp and Freeman. | La Grange, Ill. |
| July 27. | Peters, Eddie. | Larceny. | Farnsworth and Sullivan. | Toronto, Ont. |
| Aug. 7. | Peterson, Charles, alias. | Highway robbery. | Bock and Fitzpatrick. | Manistee, Mich. |
| Sept. 24. | Pollock, Martin. | Receiving money by F. P. | Loftus and McCarthy. | Louisville, Ky. |
| Oct. 6. | Payne, George. | Burglary. | Hogan and Wessler. | Ottawa, Ill. |
| Nov. 11. | Peters, Walter B. | Forgery. | Sullivan and O'Connell. | New York. |
| Nov. 19. | Palunas, Casmer. | Burglary. | Hartford and Tierney. | Westville, Ill. |
| May 2. | Quinn, William. | Embezzlement. | Bock and McCarthy. | Pottsville, Pa. |
| Apr. 2. | Ryan, Daniel, alias. | Burglary. | Frank Deegan. | Minneapolis, Minn. |
| July 6. | Reynolds, John, alias. | Ob. money by F. P. | Johnson and Brown. | Rock Island, Ill. |
| July 8. | Robbins, Ed. | Larceny. | McWeeny and Welbasky. | Davenport, Ia. |
| Aug. 6. | Risley, A. D. | Embezzlement. | Stible and Spain. | Decatur, Ill. |
| Aug. 21. | Ruffner, Fred. | Cruelty to animals. | Howard and McCarthy. | Watertown, Wis. |
| Aug. 23. | Ryan, Thomas, alias. | Burglary. | Plunkett and Burke. | Indianapolis, Ind. |
| Sept. 18. | Rockwood, Arthur, alias. | Burglary. | Jones, Anderson, Reed & Artis. | Indianapolis, Ind. |
| Sept. 23. | Ruby, John. | Larceny. | Howard and McCarthy. | Kansas City, Mo. |
| Oct. 8. | Rogers, Clifford W. | Larceny. | Hanley and Spain. | Naperville, Ill. |
| Nov. 12. | Ryan, Paddy. | Larceny and jail breaking. | Charles J. Johnson. | Bloomington, Ill. |
| Nov. 25. | Robbins, Edward. | Burglary. | Buckminster and DeRoche. | Rock Island, Ill. |
| Jan. 14. | Spero, Michael. | Arson. | Hanley and Elliott. | Hazleton, Pa. |
| Mar. 6. | Sheldon, Edgar, alias. | Jail breaking. | Bock and McCarthy. | Fond du Lac, Wis. |
| Mar. 18. | Slater, George, alias. | Burglary. | Hartford & Tierney. | Peoria, Ill. |
| May 2. | Spring, William. | Embezzlement. | Magner & Weber. | Pottsville, Pa. |
| July 16. | Smith, Albert. | Burglary and Larceny. | Trehorn and Flynn. | Springfield, Ill. |
| July 16. | Saxon, Lon. | Assault, robbery and att. rape. | DeRoche and Marks. | Logansport, Ind. |
| Aug. 14. | Sackett, Oliver P. | Attempted burglary. | Norton and Weber. | Kenosha, Wis. |
| Sept. 5. | Stokes, J. H. | Robbery, burglary and jail br. | | Oshkosh, Wis. |

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|-----------|---------------------------|-----------------------|-------------------------------|-----------------------|
| Nov. 4. | Snyder, George H. | Embezzlement. | Smith and Tobin. | Springfield, O. |
| Nov. 5. | Smith, John. | Forgery. | Anderson and Maher. | Chicago Heights, Ill. |
| Mar. 13. | Thornton, John, alias. | Larceny. | Norton and Smith. | Louisville, K. |
| June 4. | Tipney, Thessa. | Forgery. | Bock and McCarthy. | Milwaukee, Wis. |
| Aug. 24. | Thompson, W. G., alias. | Forgery. | Plunkett and Burke. | Cleveland, O. |
| Sept. 25. | Taylor, Charles, alias. | Burglary. | Wennerholm and Gaurity. | Detroit, Mich. |
| Nov. 7. | Topakyan, G. H. | Larceny. | Plunkett and Burke. | New York. |
| Nov. 15. | Tighe, E. | Forgery. | Hauley and Spain. | Peoria, Ill. |
| Dec. 15. | Thompson, F. H., alias. | Burglary. | Haerle and Strum. | Detroit, Mich. |
| April 23. | Von Buelow, Carl. | Ob. money by F. P. | Bock and McCarthy. | Des Moines, Ia. |
| April 2. | Wilcox, Axel. | Prize fighting. | Schelin and Murdock. | Crown Point, Ind. |
| April 18. | Worth, Harry, alias. | Larceny. | Haerle and Strum. | New York. |
| April 26. | Willka, Chas. | Escaped convict. | R. J. Miller. | Greenwood. |
| April 28. | Wallace, J. B. | Embezzlement. | Arnstein and Murnane. | St. Paul, Minn. |
| June 28. | Whalen, William, alias. | Burglary. | Conick and Sweig. | Cincinnati, O. |
| Aug. 1. | Webster, Duane. | Attempted murder. | Lt. Messner and Off. Bagnell. | Butler, Ind. |
| Nov. 13. | Wallace, Christ. | Larceny. | Loftus and McCarthy. | New York. |
| Nov. 15. | Wolfe, Virgil M. | Larceny (H. S.). | Kelly and Kisselburg. | Hannibal, Mo. |
| Dec. 5. | Williams, Charles, alias. | Burglary and Larceny. | Edward Maher. | Earlville, Ill. |
| Oct. 17. | Zantke, August. | Embezzlement. | Hott and Kinder. | Milwaukee, Wis. |

FUGITIVES FROM JUSTICE

Arrested in other Cities and returned to Chicago for Trial, 1896.

| Date. | Name of Fugitive. | Crime. | Officers Making Arrest. | Brought Back From. |
|----------|----------------------------|--------------------------|-------------------------|--------------------|
| Aug. 29. | Alverdes, George. | Larceny. | Bock and Fitzpatrick. | New York. |
| June 20. | Bosonowski, Henry. | Larceny and abandonment. | E. J. Wallace. | Pittsburgh, Pa. |
| Jan. 18. | Cavanaugh, Wiley. | Robbery. | Lieut. Thomas. | Arcola, Ill. |
| June 8. | Cogswell, William H. | Larceny. | Flynn and Trehorn. | Ottawa, Ill. |
| July 8. | Cole, George. | Larceny. | Conick and Sweig. | Milwaukee, Wis. |
| Aug. 8. | Creed, Eugene. | Larceny. | Kiple and Buckminster. | Toledo, O. |
| Oct. 15. | Campbell, John. | Larceny and abduction. | Kipleason and Cuklin. | Geneva, Ill. |
| Dec. 9. | Cole, C., alias "Frenchy." | Burglary. | Kipleason and Cowdrey. | Cleveland, O. |
| Dec. 9. | Clark, John, alias Ryan. | Burglary. | Kipleason and Cowdrey. | Cleveland, O. |
| Jan. 23. | Deane, Henry, alias. | Forgery. | Norton and Smith. | Utica, N. Y. |
| July 8. | Delaney, William. | Larceny. | Conick and Sweig. | Milwaukee, Wis. |

| Date. | Name of Fugitive. | Crime. | Officers Making Arrest. | Brought Back From. |
|-----------|-----------------------------|--------------------------------|-------------------------------|---------------------|
| July 20. | Dempsey, James. | Burglary and robbery. | Lt. Wood and Off. McKeough | Detroit, Mich. |
| Oct. 4. | Emerlich, John, alias. | Larceny. | Kelly and Kisselburg. | Detroit, Mich. |
| Oct. 4. | Emerlich, Martha, alias. | Larceny. | Kelly and Kisselburg. | Detroit, Mich. |
| Dec. 17. | Eklund, George. | Murder. | Mackey and Sperling. | Barrington, Ill. |
| Feb. 27. | Foster, William. | Burglary. | Peter C. Dick. | Cassopolis, Mich. |
| Feb. 26. | Gerling, Frank. | Rape. | Sheehan and Stiff. | Whiting, Ind. |
| June 22. | Gillespie, Lorin V., alias. | Larceny. | Cowdrey and Buckminster. | Louisville, Ky. |
| July 17. | Haviland, Geo. K. | Abandonment. | Cudmore and O'Rourke. | Michigan City, Ind. |
| Aug. 12. | Handy, J. B., alias. | Larceny. | Plunkett and Burke. | Port Huron, Mich. |
| Nov. 22. | Hawkins, Harry E. | Embezzlement. | Boock and Fitzpatrick. | Philadelphia, Pa. |
| Nov. 21. | Hawkins, George. | Burglary and robbery. | Stible and Trehorn. | Buffalo, N. Y. |
| Nov. 21. | Hawkins, Arthur. | Burglary and robbery. | Stible and Trehorn. | Buffalo, N. Y. |
| Feb. 26. | Johnson, Daniel. | Larceny. | Plunkett and Fay. | Denver, Col. |
| Apr. 19. | Jenkins, Robert. | Larceny. | Peter C. Dick. | Spring Valley, Ill. |
| Oct. 31. | Lothian, Fred J. | Burglary. | Webber and Almindinger. | Racine, Wis. |
| June 30. | Margrouts, Fricho. | Larceny. | Phelan and O'Rourke. | Hammond, Ind. |
| Mar. 29. | Madden, William H. | Forgery. | Boock and McCarthy. | Mobile, Ala. |
| July 20. | Monahan, Michael. | Burglary and robbery. | Lt. Wood and Off. McKeough | Detroit, Mich. |
| Apr. 17. | McCullum. | Larceny. | Culhane and Connell. | Monmouth, Ill. |
| Jan. 24. | Northrup, Herbert. | Larceny. | Peter C. Dick. | Buffalo, N. Y. |
| Feb. 20. | Norton, Richard. | Embezzlement. | Peter C. Dick. | Austin, Tex. |
| Dec. 10. | O'Connor, Darace. | Murder. | Dean and Griffin. | Indianapolis, Ind. |
| July 20. | Orme, John. | Burglary and robbery. | Lt. Wood and Off. McKeough | Detroit, Mich. |
| Apr. 16. | Prince, Geo., alias "Fox". | Larceny. | Boock and McCarthy. | Cincinnati, O. |
| Nov. 18. | P rice, Scott. | Murder. | Reid, Jones, Artis & Anderson | Terre Haute, Ind. |
| Oct. 30. | Palmer, Harry A. | Larceny. | Kipley and Buckminster. | Kenosha, Wis. |
| June 14. | Robinson, H., al. Howard | Larceny. | Tobin and Almindinger. | Detroit, Mich. |
| July 6. | Roehl, W. E. | Larceny and sell. mortg. prop. | Wm. B. Thorpe. | Omaha, Neb. |
| Oct. 29. | Russell, Charles E. | Confidence game. | Haerle and Almindinger. | LaPorte, Ind. |
| May 21. | Smith, J. C. | Larceny (H. S.). | Kelly and Kisselburg. | Winnemac, Ind. |
| May 31. | Setters, William. | Burglary. | Hamilton and Phelan. | Joliet, Ill. |
| Sept. 26. | Shaw, Charles E. | Burglary. | Magnus and Arnstein. | New York. |
| Oct. 15. | Smith, William R. | Larceny. | Boock and Fitzpatrick. | Fargo, N. D. |
| June 12. | Tober, Jack. | Assault to kill. | Tobin and Almindinger. | Detroit, Mich. |
| May 31. | Walters, Edward. | Burglary. | Hamilton and Phelan. | Joliet, Ill. |

STATEMENT

Showing Aggregate Number of Arrests, Amount of Fines Imposed, Value of Property Reported Stolen, Value of Stolen Property Recovered, Expenditure of the Department, etc., each Year since 1879.

| YEAR ENDING. | Numerical Strength of the Police Force Officers and Men. | Number of Arrests. | Amount of Fines Imposed. | Value of Property Reported Stolen. | Value of Property Recovered. | Expenses of Police Department. |
|------------------------|--|--------------------|--------------------------|------------------------------------|------------------------------|--------------------------------|
| December 31, 1879..... | 453 | 27,388 | \$205,147.00 | \$106,034.71 | \$93,370.76 | \$445,195.42 |
| December 31, 1880..... | 473 | 28,480 | 151,560.00 | 142,559.41 | 125,509.35 | 493,672.38 |
| December 31, 1881..... | 506 | 31,713 | 163,937.00 | 147,444.36 | 118,508.56 | 377,037.77 |
| December 31, 1882..... | 557 | 32,800 | 159,495.00 | 129,925.37 | 91,265.35 | 659,259.70 |
| December 31, 1883..... | 637 | 37,187 | 223,441.00 | 144,802.04 | 90,729.06 | 703,579.66 |
| December 31, 1884..... | 924 | 39,484 | 229,230.00 | 149,837.85 | 112,943.43 | 779,721.45 |
| December 31, 1885..... | 924 | 40,998 | 202,000.00 | 152,113.43 | 103,116.21 | 1,079,344.74 |
| December 31, 1886..... | 1,032 | 44,261 | 242,036.00 | 161,628.24 | 149,988.52 | 1,192,769.56 |
| December 31, 1887..... | 1,145 | 46,505 | 259,249.00 | 210,950.44 | 168,023.03 | 1,305,562.67 |
| December 31, 1888..... | 1,255 | 50,432 | 305,176.00 | 222,249.78 | 193,141.67 | 1,450,437.40 |
| December 31, 1889..... | 1,624 | 48,119 | 275,925.00 | 218,163.43 | 206,822.12 | 1,602,594.60 |
| December 31, 1890..... | 1,900 | 62,230 | 363,938.00 | 276,606.70 | 228,885.73 | 2,200,126.90 |
| December 31, 1891..... | 2,306 | 70,550 | 464,850.02 | 359,144.95 | 309,585.45 | 2,622,046.45 |
| December 31, 1892..... | 2,726 | 89,833 | 615,822.10 | 427,128.70 | 319,305.00 | 3,035,043.92 |
| December 31, 1893..... | 3,189 | 96,676 | 523,359.00 | 656,330.15 | 294,129.83 | 3,550,557.70 |
| December 31, 1894..... | 3,188 | 88,323 | 452,340.00 | 545,710.00 | 392,082.14 | 3,643,936.17 |
| December 31, 1895..... | 2,850 | 86,464 | 301,555.00 | 501,523.90 | 360,358.82 | 3,421,875.63 |
| December 31, 1896..... | 3,033 | 96,847 | 300,319.00 | 453,428.95 | 429,822.00 | ..... |

POLICEMEN INJURED WHILE ON DUTY DURING THE YEAR

| NAME. | WHERE STATIONED. | DATE OF INJURY. | |
|------------------------------|---------------------|--------------------|----|
| Patrolman G. Sunderberg..... | 1st Precinct..... | January | 20 |
| “ E. Murnane..... | 1st “..... | January | 28 |
| “ M. Hellberg..... | 1st “..... | February | 2 |
| “ A. C. Bishoff..... | 1st “..... | March | 4 |
| “ B. J. McAuliff..... | 1st “..... | March | 20 |
| “ Thos. Maley..... | 2nd “..... | February | 15 |
| “ Thos. Mahoney..... | 3rd “..... | January | 24 |
| “ Daniel Pembroke.... | 6th “..... | February | 14 |
| “ William Delanty..... | 13th “..... | February | 20 |
| “ Peter Zeigler..... | 15th “..... | February | 20 |
| “ James Rowan..... | 15th “..... | February | 20 |
| “ Anton Ozenkowski.. | 15th “..... | February | 20 |
| “ Thomas Moran..... | 15th “..... | February | 20 |
| “ Martin Grace..... | 17th “..... | March | 3 |
| “ Charles Desch..... | 19th “..... | March | 15 |
| “ Dennis Collopy..... | 21st “..... | January | 4 |
| “ Hubert Hoffman..... | 21st “..... | January | 22 |
| “ William Brown..... | 21st “..... | January | 28 |
| “ Robert Adlum..... | 21st “..... | February | 12 |
| “ Michael Kiely..... | 21st “..... | February | 13 |
| “ John Moore..... | 21st “..... | February | 17 |
| “ Napoleon LaBlanc... | 21st “..... | February | 21 |
| “ Jerry Sweig..... | 21st “..... | March | 5 |
| “ Daniel Hartnett..... | 21st “..... | March | 9 |
| “ Michael J. Clohessey. | 23rd “..... | March | 24 |
| “ James Fallen..... | 29th “..... | March | 15 |
| “ Swen Johnson..... | 32nd “..... | January | 16 |
| “ Fred M. Ryder..... | 40th “..... | March | 16 |
| “ August Loettker..... | 1st “..... | April | 8 |
| “ D. Keogh..... | 1st “..... | April | 16 |
| “ L. Peters..... | 1st “..... | April | 22 |
| “ J. Farrell..... | 1st “..... | April | 22 |
| “ Geo. Reman..... | 1st “..... | April | 25 |
| “ M. Sullivan..... | 1st “..... | April | 25 |
| “ Martin McFadden.... | 7th “..... | April | 17 |
| “ James Hanrahan..... | 7th “..... | May | 2 |
| “ Simon O’Connell.... | 7th “..... | May | 19 |
| “ Michael J. Haggerty. | 13th “..... | April | 29 |
| “ John Lyons..... | 13th “..... | June | 1 |
| “ Orlando P. Tidd.. | 14th “..... | June | 2 |
| “ M. J. Crean..... | 18th “..... | April | 10 |
| “ Charles Fugate..... | 19th “..... | June | 28 |
| “ James Snyder..... | 21st “..... | April | 25 |
| “ Lewis F. Shane..... | 21st “..... | June | 20 |
| “ Anton Radomski.... | 23rd “..... | June | 16 |
| “ Wm. I. Neff..... | 29th “..... | May | 2 |

POLICEMEN INJURED WHILE ON DUTY DURING THE YEAR

| NAME. | | WHERE STATIONED. | DATE OF INJURY. | |
|-------------|-----------------------|---------------------|--------------------|----|
| Patrolman | Robert Schroyen..... | 40th Precinct..... | April | 19 |
| " | M. O'Malley..... | 40th "..... | May | 6 |
| Sergeant P. | J. Joyce..... | 1st "..... | July | 7 |
| Patrolman | Thomas O'Malley ... | 1st "..... | July | 10 |
| " | Phil. Flemming..... | 1st "..... | September | 2 |
| " | John Ryan..... | 1st "..... | September | 17 |
| " | C. Cronin..... | 1st "..... | September | 22 |
| " | John Moriarty..... | 2nd "..... | August | 2 |
| " | James J. Fitzgerald.. | 7th "..... | July | 16 |
| " | John P. Nolan..... | 7th "..... | July | 16 |
| " | Bernard P. Brady.... | 7th "..... | July | 16 |
| " | Henry R. Rathz..... | 7th "..... | August | 18 |
| " | Alexander Rowans... | 19th "..... | August | 1 |
| " | Thomas Murry..... | 21st "..... | July | 2 |
| " | George Barker..... | 21st "..... | July | 14 |
| " | William Brown..... | 21st "..... | July | 20 |
| " | S. Zellinka..... | 21st "..... | August | 2 |
| " | James Hallihan..... | 21st "..... | August | 4 |
| " | L. W. Brown..... | 21st "..... | August | 5 |
| " | John Bagensky..... | 21st "..... | September | 20 |
| " | John Foley..... | 21st "..... | September | 25 |
| " | J. P. Haag..... | 22nd "..... | July | 2 |
| " | Jos. Turek..... | 22nd "..... | September | 5 |
| " | Wm. J. Dinsmore.... | 29th "..... | July | 5 |
| " | John G. Koch..... | 34th "..... | September | 18 |
| Sergeant W. | Saur..... | 38th "..... | July | 11 |
| Patrolman | D. Mulcahy..... | 1st "..... | November | 19 |
| " | J. Bomfeld..... | 1st "..... | November | 27 |
| " | A. Danahy..... | 1st "..... | October | 12 |
| " | Geo. Detterling..... | 1st "..... | October | 16 |
| " | Dan Hogan..... | 1st "..... | October | 25 |
| " | T. O'Shea..... | 1st "..... | October | 27 |
| " | P. S. O'Connell..... | 1st "..... | October | 31 |
| " | Geo. Euson..... | 1st "..... | December | 2 |
| " | Wm. Messenger..... | 2nd "..... | October | 19 |
| Lieutenant | L. A. Taylor..... | 2nd "..... | October | 26 |
| Patrolman | Allen McDonald..... | 2nd "..... | October | 31 |
| " | F. H. Artis..... | 2nd "..... | November | 12 |
| " | Charles Desch..... | 19th "..... | December | 8 |
| " | Thomas Kirby..... | 21st "..... | November | 16 |
| " | Aug. G. Delemater... | 23rd "..... | November | 14 |
| " | Henry A. Connell.... | 28th "..... | December | 3 |
| " | Martin Mathiesen.... | 35th "..... | November | 7 |
| " | Milo M. Wheadon.... | 35th "..... | November | 7 |
| " | William Woodard.... | 42nd "..... | November | 4 |

OBITUARY.

| NAMES. | Date of Death. | Age. | Date of Appointment on Force. | Where Assigned. | Cause of Death. | Married or Single. |
|--------------------------|----------------|------|-------------------------------|-----------------|----------------------|--------------------|
| James R. Pendergast..... | Jan. 17 | 46 | June 15, 1883. | 40th Precinct. | Bright's Disease.... | Married. |
| Edward J. Halle..... | Feb. 13 | 31 | April 7, 1889. | 24th | Typhoid Fever..... | Married. |
| Robt. A. Davis..... | Mar. 3 | 33 | Feb. 17, 1887. | 3rd | Consumption..... | Married. |
| John J. Gallagher..... | Mar. 11 | 36 | Dec. 15, 1884. | 27th | Consumption..... | Married. |
| Michael W. Clinton..... | Mar. 16 | 39 | Dec. 7, 1890. | 13th | Bright's Disease.... | Married. |
| William Lindgreen..... | Apr. 24 | 56 | Sept. 18, 1889. | 39th | Pneumonia..... | Married. |
| John Cregan..... | June 6 | 48 | June, 1, 1883. | 1st | Consumption..... | Married. |
| Dennis Fitzpatrick..... | July 1 | 56 | May 1, 1886. | 15th | Effects of Operation | Married. |
| Charles W. Wasmond..... | July 15 | 52 | July 18, 1873. | 34th | Typhoid Fever..... | Married. |
| Peter D. Wambo..... | Aug. 4 | 36 | Oct. 12, 1891. | 23rd | Consumption..... | Married. |
| Richard McCormick..... | Aug. 14 | 35 | Apr. 20, 1886. | 1st | Consumption..... | Single. |
| Thomas Noonan..... | Oct. 13 | 46 | April 2, 1872. | 2nd | Dropsy..... | Married. |

LOCATION OF Police Fire Alarm Telephone Boxes.

FIRST PRECINCT.

Michigan avenue and South Water street.
Michigan avenue and Randolph street.
Michigan avenue and Madison street.
Michigan avenue and Adams street.
Van Buren street and Wabash avenue.
State and South Water streets.
State and Randolph streets.
State and Madison streets.
State and Van Buren streets.
Clark and South Water streets.
Clark and Randolph streets.
Clark and Madison streets.
Clark and Van Buren streets.
Fifth avenue and South Water street.
Fifth avenue and Randolph street.
Fifth avenue and Adams street.
Fifth avenue and Madison street.
Lake and Market streets.
Madison and Market streets.
Adams and Market streets.
Rush street and Michigan avenue.
Franklin and Washington streets.
Clark and Adams streets.
East End of Randolph street Viaduct.

SECOND PRECINCT.

Harrison and State streets.
Hubbard court and Michigan avenue.
Harrison street and Fourth avenue.
Clark and Polk streets.
Twelfth street and Michigan avenue.
Twelfth and Clark streets.
Market and Van Buren streets.

Clark and Taylor streets.
Fourteenth street and Michigan avenue.
Fifth avenue and Van Buren street.
Twelfth and State streets.
Fourteenth and Clark streets.
Polk and State streets.
Fifth avenue and Polk street.
State and Taylor streets.
State and Fourteenth streets.
Western Indiana Depot.
Wabash avenue and Fifteenth street.
Northern Pacific Railway Depot.

THIRD PRECINCT.

Twenty-second and Grove streets.
State street and Archer avenue.
Twenty-second and State streets.
Twenty-fourth and State streets.
Twenty-sixth and State streets.
Twenty-ninth and State streets.
Twenty-sixth street and Wentworth avenue.
Twenty-third street and Wentworth avenue.
Clark street and Archer avenue.
Eighteenth and Clark streets.
Sixteenth and Clark streets.
Twentieth and Purple streets.
Portland avenue and Twenty-seventh street.
Shields avenue and Thirtieth street.
Twenty-ninth and Canal streets.
Wallace and Thirtieth streets.
Union avenue and Twenty-ninth street.
Twenty-sixth and Halsted streets. (Private.)
Portland avenue and Alexander street.
Archer avenue and Butler street.
Twenty-sixth street and Shields avenue.
Halsted street and Archer avenue.
Twenty-fourth place and Canal street.
Sixteenth and State streets.
Twenty-first and Dearborn streets.
Wallace and Twenty-sixth streets.
Swift place and Wentworth avenue.

FOURTH PRECINCT.

Prairie avenue and Eighteenth street.
Indiana avenue and Twentieth street.
Indiana avenue and Twenty-second street.

Wabash avenue and Twenty-second street.
Wabash avenue and Eighteenth street.
Wabash avenue and Twentieth street.
Wabash avenue and Twenty-sixth street.
Calumet avenue and Twenty-fourth street.
Cottage Grove avenue and Twenty-ninth street.
Cottage Grove avenue and Twenty-seventh street.
Indiana avenue and Twenty-sixth street.
South Park avenue and Twenty-second street.
Indiana avenue and Twenty-ninth street.
Indiana avenue and Twenty-fourth street.
Sixteenth street and Michigan avenue.
Thirtieth street and South Park avenue.
Twenty-ninth street and Calumet avenue.
Calumet avenue and Thirty-first street.
State and Thirtieth streets.
Thirtieth street and Graceland avenue.
Thirty-fifth street and Indiana avenue.
Sixteenth street and Indiana avenue.

FIFTH PRECINCT.

Thirty-eighth street and Langley avenue.
Thirty-seventh street and Forrest avenue.
Thirty-first and State streets.
Thirty-third and State streets.
Thirty-fifth and State streets.
Thirty-seventh and State streets.
Thirty-ninth and State streets.
Lake avenue and Piere street.
Thirty-fifth street and Cottage Grove avenue.
Thirty-third street and Cottage Grove avenue.
Thirty-first street and Cottage Grove avenue.
Thirty-seventh street and Cottage Grove avenue.
Thirty-seventh street and Stanton avenue.
Thirty-ninth street and Cottage Grove avenue.
Thirty-fifth street and South Park avenue.
Thirty-sixth street and Indiana avenue.
Thirty-ninth street and Indiana avenue.
Thirty-ninth street and Vincennes avenue.
Thirty-third street and South Park avenue.
Thirty-third street and Indiana avenue.
Thirty-fourth street and Wabash avenue.

SIXTH PRECINCT.

Thirty-third and Halsted streets.
Thirty-seventh and Halsted streets.
Thirty-first and Halsted streets.
Thirty-ninth and Halsted streets.
Thirty-fifth and Laurel streets.
Thirty-first and Laurel streets.
Thirty-eighth and Laurel streets.
Thirty-fifth and Ullman streets.
Wallace and Thirty-fifth streets.
Thirty-third street and Wentworth avenue.
Thirty-first street and Wentworth avenue.
Thirty-ninth street and Wentworth avenue.
Thirty-seventh street and Wentworth avenue.
Thirty-fifth street and Wentworth avenue.
Thirty-second and Benson streets.
Thirty-ninth and Wallace streets.
Thirty-first street and Parnell avenue.
Thirty-seventh and Wallace streets.
Thirty-third and Wallace streets.
Laurel street and Springer avenue.
Ullman street and Springer avenue.
Thirty-fourth street and Auburn avenue.
Thirty-ninth street and Stewart avenue.
Musprat and Thirty-second streets.

SEVENTH PRECINCT.

Thirty-eighth street and Ashland avenue.
Thirty-seventh and Paulina streets.
Thirty-fifth and Wood streets.
Thirty-seventh street and Archer avenue.
Wood street and Archer avenue.
Thirty-fifth street and Archer avenue.
Thirty-fifth street and Ashland avenue.
Ashland avenue between Canal and River.
Lime street and Archer avenue.
Thirty-first and Lock streets.
Thirty-first and Deering streets.
Putney street and Archer avenue.
Farrell street and Archer avenue.
Mary street and Archer avenue.
Church place and Archer avenue.
Thirty-third street and Ashland avenue.
Archer and Ashland avenues.

Deering and Cologne streets.
Thirty-sixth and Robey streets.
Thirty-seventh and Wood streets.
Fuller and Cologne streets.
Twenty-ninth and Halsted streets.
Main and Sterns streets.
Hickory and Joseph streets.
Lyman and Keeley streets.
Oakley avenue and Thirty-fifth street.
Thirty-third street and Hoyne avenue.
Lundy's Lane and Thirty-fourth street.
Main and Cologne streets.

EIGHTH PRECINCT.

Central Park and Fifty-first streets.
Western avenue and Forty-third street.
California and Archer avenues.
Western avenue and Thirty-ninth street.
St. Louis avenue and Thirty-ninth street.
Rockwell and Thirty-sixth streets.
Archer and Genesee avenues.
Kedzie avenue and Forty-seventh street.
Blanchard avenue and Thirty-ninth street.
Western avenue and Thirty-fifth street.
Pearson avenue and Thirty-eighth street.
Archer and Western avenues.
California avenue and Thirty-sixth street.
Western avenue and Fifty-first street.

NINTH PRECINCT.

(Not opened.)

TENTH PRECINCT.

Woodlawn avenue and Forty-seventh street.
Cottage Grove avenue and Fifty-first street.
Ellis avenue and Forty-first street.
Lake avenue and Forty-ninth street.
Lake avenue and Forty-third street.
Cottage Grove and Bowen avenues.
Greenwood avenue and Fifty-third street.
Woodlawn avenue and Fifty-first street.
Fifty-fourth street and Cornell avenue.
Woodlawn avenue and Fifty-fifth street.

Fifty-fifth street and Ridgewood court.
Lake avenue and Fifty-fifth street.
Oakwood and Ellis avenues.
Ellis avenue and Forty-fifth street.
Woodlawn avenue and Forty-fifth street.
Ellis avenue and Forty-ninth street.
Madison avenue and Fifty-first street.
Cottage Grove avenue and Forty-third street.
Woodlawn avenue and Fifty-seventh street.
Cottage Grove avenue and Fifty-seventh street.
Madison avenue and Fifty-eighth street.
Lake avenue and Fifty-seventh street.
Cottage Grove avenue and Fifty-fifth street.
Forty-seventh street and Drexel avenue.
Fifty-sixth street and East End avenue.

ELEVENTH PRECINCT.

Forty-third and State streets.
Forty-first street and Vincennes avenue.
Forty-first street and Indiana avenue.
Forty-fifth street and Indiana avenue.
State and Fifty-third streets.
Forty-seventh street and St. Lawrence avenue.
Champlain avenue and Forty-third street.
Fifty-first street and Grand Boulevard.
State and Forty-seventh streets.
State and Fortieth streets.
Langley avenue and Fortieth street.
Forrestville avenue and Fiftieth street.
Indiana avenue and Fifty-first street.
Indiana avenue and Forty-ninth street.
Indiana avenue and Fifty-third street.
Vincennes avenue and Forty-fifth street.
Evans avenue and Forty-fifth street.
Evans avenue and Forty-ninth street.
Prairie avenue and Forty-third street.
Prairie avenue and Forty-seventh street.
Root and Dearborn streets.
State and Forty-fifth streets.
State and Fifty-fifth streets.

TWELFTH PRECINCT.

Stony Island avenue and Sixty-first street.
Woodlawn avenue and Sixty-sixth street.
Cottage Grove avenue and Sixty-third street.

Stony Island avenue and Sixty-seventh street.
Oglesby avenue and Sixty-fourth street.
Cottage Grove avenue and Sixty-seventh street.
McChesney avenue and Sixty-fourth street.
Sixty-first street and St. Lawrence avenue.
Woodlawn avenue and Sixty-third street.
Madison avenue and Sixtieth street.
Cottage Grove avenue and Sixtieth street.
Madison avenue and Sixty-third street.
Oglesby avenue and Sixty-seventh street.
South Park avenue and Sixty-third street.
Oglesby avenue and Seventieth street.
South Park avenue and Sixty-seventh street.
Palmer avenue and Sixty-eighth street.
Stony Island avenue and Seventieth street.
Vincennes avenue and Sixty-ninth street.
Ellis avenue and Sixty-third street.
Ellis avenue and Sixty-fifth street.

THIRTEENTH PRECINCT.

Cottage Grove avenue and Seventy-first street.
Seventy-ninth street and South Chicago avenue.
Woodlawn avenue and Seventy-sixth street.
Jefferson avenue and Ninety-third street.
Euclid avenue and Seventy-first street.
Madison avenue and Seventy-third street.
Greenwood avenue and Seventy-second street.
Seventy-fifth street and Stony Island avenue.
Stony Island avenue and Eighty-third street.
Cottage Grove avenue and Seventy-fifth street.
Woodlawn avenue and Seventy-ninth street.
Cottage Grove avenue and Eighty-eighth street.
Cottage Grove avenue and Ninety-third street.
South Park avenue and Seventy-first street.

FOURTEENTH PRECINCT.

Pullman Hose House.
Riverdale Bridge.
Michigan avenue and One Hundred and Sixteenth street.
Michigan avenue and One Hundred and Seventh street.
Watt avenue and One Hundred and Fifteenth street.
Pullman avenue and One Hundred and Eighth street.
Michigan avenue and One Hundred and Fourteenth street.
Erickson avenue and One Hundred and Fifth street.

Michigan avenue and One Hundred and Eleventh street.
Gardner's Park.

Portland avenue and One Hundred and Seventeenth street.
Stewart avenue and One Hundred and Twenty-first street.
Halsted and One Hundred and Twentieth street.
Michigan avenue and One Hundred and Third street.
State and One Hundred and Nineteenth street.

FIFTEENTH PRECINCT.

Superior avenue and Eighty-sixth street.
I. C. R. R. and Seventy-ninth street.
Commercial avenue and Ninety-eighth street.
Commercial avenue and Eighty-third street.
One Hundred and Sixth street and Torrence avenue.
Buffalo avenue and Eighty-eighth street.
Torrence avenue and One Hundred and Eighth street.
Avenue L and One Hundreth street.
Commercial avenue and Seventy-ninth street.
Commercial avenue and Ninety-fourth street.
I. C. R. R. and Ninetieth street.
Commercial avenue and Eighty-seventh street.
Harbor avenue and Ninety-second street.
Avenue K and Ninety-sixth street.
I. C. R. R. and Ninety-second street.
Avenue K and One Hundred and Third street.
Commercial avenue and One Hundred and Second street.
Strand avenue and Ninetieth street.
Commercial avenue and Ninety-third street.
Manistee avenue and Ninety-third street.
Marquette avenue and Eighty-eighth street.
Avenue M and One Hundred and Sixth street.
Exchange avenue and Ninety-second street.
Railroad avenue and Seventy-fifth street.
Bond avenue and Seventy-third street.

SIXTEENTH PRECINCT.

(Abandoned Nov. 20, 1894.)

SEVENTEENTH PRECINCT.

State and Fifty-ninth streets.
Halsted and Fifty-ninth streets.
Halsted and Sixty-third streets.
Stewart avenue and Sixty-seventh street.

Ashland avenue and Sixty-ninth street.
State and Sixty-seventh streets.
Central Park avenue and Sixty-third street.
Centre avenue and Seventy-fifth street.
State and Sixty-first streets.
Halsted and Sixty-ninth streets.
Halsted and Fifty-seventh streets.
Wright and Fifty-fifth streets.
Wallace and Fifty-seventh streets.
Wallace and Sixty-seventh streets.
Wentworth avenue and Fifty-ninth street.
Ashland avenue and Sixty-third street.
State and Fifty-seventh streets.
Wentworth avenue and Fifty-seventh street.
Stewart avenue and Fifty-seventh street.
Centre avenue and Sixty-ninth street.
Centre avenue and Sixty-third street.
Bishop and Sixty-seventh streets.
Halsted and Seventy-first streets.
Fifty-seventh street and Ashland avenue.
Fifty-ninth street and Ashland avenue.
Sixty-ninth street and Western avenue.
Sixty-third street and Stewart avenue.
Sixty-first and State streets.
Fifty-ninth street and Centre avenue.
Fifty-seventh street and Centre avenue.
Fifty-fifth and Morgan streets.

EIGHTEENTH PRECINCT.

One Hundred and Third street and Vincennes avenue.

NINETEENTH PRECINCT.

Centre avenue and Forty-seventh street.
Loomis and Forty-fifth streets.
Forty-third street and Ashland avenue.
Halsted and Fifty-second streets.
Armour's office at Packing House.
Morgan and Fifty-third streets.
Halsted and Fifty-fifth streets.
Wallace and Fortieth streets.
Wood and Forty-third streets.
Ashland avenue and Fifty-fifth street.
Robey and Forty-seventh streets.
Stock Yards Exchange.

Wentworth avenue and Fortieth street.
Root and Halsted streets.
Fifty-fifth street and Centre avenue.
Forty-seventh street and Ashland avenue.
Wallace and Fifty-first streets.
Forty-third street and Wentworth avenue.
Wentworth avenue and Forty-seventh street.
Wentworth avenue and Fifty-first street.
Loomis and Forty-seventh streets.
Rock Island tracks and Root street.
Atlantic and Forty-fifth streets.
Root street and Stewart avenue.
Forty-seventh and Wright streets.
Halsted and Forty-fifth streets.
Wentworth avenue and Fifty-fifth street.
Ashland avenue and Fifty-first street.
Ashland avenue and Fortieth street.
Centre avenue and Fifty-first street.
Wood and Fifty-first streets.
Wallace and Forty-third streets.
Emerald avenue and Fortieth street.

TWENTIETH PRECINCT.

(Not opened.)

TWENTY-FIRST PRECINCT.

Clinton and Harrison streets.
Halsted and Harrison streets.
Morgan and Harrison streets.
May and Harrison streets.
Sholto and Gurley streets.
Polk and Ellsworth streets.
Polk and Desplaines streets.
Polk street and Blue Island avenue.
Polk street and Centre avenue.
Polk street and Sibley avenue.
Canal and Ewing streets.
Halsted and Ewing streets.
Taylor and Jefferson streets.
Taylor and Halsted streets.
Taylor street and Blue Island avenue.
Taylor street and Centre avenue.
Bunker and Jefferson streets.
West Twelfth and Holden streets.
Loomis and Fourteenth streets.

Ashland avenue and Fourteenth street.
Paulina and Fifteenth streets.
Taylor and Loomis streets.
Canal and West Twelfth streets.
Desplaines and West Twelfth streets.
Brown and West Twelfth streets.
Blue Island avenue and West Twelfth street.
Centre avenue and West Twelfth street.
Loomis and West Twelfth streets.
Halsted and O'Brien streets.
Blue Island avenue and Washburne street.
Jefferson street and Thirteenth place.
Throop and Thirteenth streets.
Lafin and Fifteenth streets.
West Fourteenth and Canal streets.
West Fourteenth and Halsted streets.
West Fourteenth and Morgan streets.
West Fourteenth street and Centre avenue.
Jefferson and West Fifteenth streets.
Union and West Fifteenth streets.
Throop and West Fifteenth streets.
Canal street and Fifteenth place.
Halsted and Sixteenth streets.
Johnson and Henry streets.
Margaret and West Fifteenth streets.
Ashland avenue and West Polk street.
Ashland avenue and West Twelfth street.
Ashland avenue and West Taylor street.
Polk and Wood streets.
Peoria street and Fourteenth place.

TWENTY-SECOND PRECINCT.

String and Sixteenth streets.
Sixteenth and Sangamon streets.
Halsted and Eighteenth streets.
Centre avenue and Eighteenth street.
Fisk and Nineteenth street.
Centre avenue and Twenty-first street.
Throop and Twenty-first streets.
Jefferson and Twenty-second streets.
Union and Twenty-second streets.
Loomis and Twenty-second streets.
May and Twenty-second streets.
Blue Island avenue and Sixteenth street.
Canal and Sixteenth streets.

Canal and Eighteenth streets.
Rubel street and Canalport avenue.
Twentieth and Sangamon streets.
Halsted and Mark streets.
Halsted and O'Neill streets.

TWENTY-THIRD PRECINCT.

Robey and West Seventeenth streets.
West Eighteenth street and Blue Island avenue.
West Eighteenth and Wood streets.
Western avenue and West Eighteenth street.
West Nineteenth and Leavitt streets.
Lafin street and Blue Island avenue.
Wood street and Blue Island avenue.
Robey street and Blue Island avenue.
Western and Blue Island avenues.
Wood and West Twenty-first streets.
Leavitt and West Twenty-first streets.
Robey and West Twenty-first streets.
Ashland avenue and West Twenty-second street.
Laughton street and Western avenue.
Rockwell and Laughton streets.
California avenue and Laughton street.
Rockwell and West Twenty-sixth streets.
Nineteenth street and Ashland avenue.
California avenue and West Twenty-second street.
Sacramento avenue and West Twenty-sixth street.
Ashland avenue and West Eighteenth street.
Robey and Twenty-second streets.
Leavitt and Twenty-third streets.
Paulina and Sixteenth streets.
Western avenue and Twenty-second street.

TWENTY-FOURTH PRECINCT.

California avenue and Twelfth street.
Ogden avenue and Rockwell street.
Western avenue and Thirteenth street.
Western avenue and Sixteenth street.
Wood and Fourteenth streets.
Western avenue and Polk street.
Robey and Fourteenth streets.
Oakley avenue and Polk street.
Ogden avenue and Taylor street.
Kedzie avenue and Twelfth street.
Rockwell and Sixteenth streets.

Harrison street and Kedzie avenue.
Wood and Twelfth streets.
Ogden and California avenues.
Robey and Twelfth streets.
Ogden avenue and Polk street.
Robey and Taylor streets.
Leavitt and Twelfth streets.
Rockwell and Twelfth streets.
Sacramento avenue and Twelfth street.
Sacramento avenue and Taylor street.
Polk street and California avenue.

TWENTY-FIFTH PRECINCT.

West Fortieth and Sixteenth streets.
Central Park avenue and Sixteenth street.
West Thirty-first and Fortieth streets.
Ogden avenue and Forty-second street.
Kedzie avenue and Thirty-first street.
Lawndale avenue and Twenty-eighth street.
West Forty-fourth and Twelfth streets.
Millard and Ogden avenues.
West Forty-fourth and Sixteenth streets.
West Forty-fourth street and Ogden avenue.
West Forty-second and Twenty-ninth streets.
Homan avenue and Twenty-second street.
Ogden avenue and Twenty-second street.
Ogden and Homan avenues.
Homan avenue and Twenty-sixth street.
West Fortieth and Twenty-sixth streets.
West Forty-fourth and Twenty-sixth streets.
Colorado avenue and Forty-eighth street.
Kedzie and Ogden avenues.
Kedzie avenue and Nineteenth street.
Central Park avenue and Twelfth street.
Millard avenue and Twenty-fourth street.
West Fortieth and Twelfth streets.
Twenty-second and Kedzie avenues.
Twelfth street and Homan avenue.

TWENTY-SIXTH PRECINCT.

(Not opened.)

TWENTY-SEVENTH PRECINCT.

Canal and Adams streets.
Halsted and Randolph streets.
Carroll avenue and Union street.
Canal and Madison streets.
Halsted and Fulton streets.
Adams and Halsted streets.
Jefferson and Van Buren streets.
Canal and Van Buren streets.
Madison and Carpenter streets.
Morgan and Fulton streets.
Madison and Sangamon streets.
Clinton street and Milwaukee avenue.
Jefferson and Adams streets.
Adams and Sangamon streets.
Madison street and Centre avenue.
Jefferson and Madison streets.
Sangamon and Van Buren streets.
Randolph and Sangamon streets.
Ann street and Carroll avenue.
Fulton and Peoria streets.
Centre avenue and Van Buren street.
Adams street and Centre avenue.
Halsted and Van Buren streets.
Halsted and Meridian streets.
Canal and Randolph streets.
Ann and Randolph streets.
Carpenter and Randolph streets.
Quincy and Desplaines streets.

TWENTY-EIGHTH PRECINCT.

Ogden avenue and Randolph street.
Ashland avenue and Madison street.
Wood and Madison streets.
Lake and Wood streets.
Ashland and Carroll avenues.
Carroll avenue and Sheldon street.
Carroll avenue and Lincoln street.
Paulina and Adams streets.
Loomis and Congress streets.
Ashland avenue and Harrison street.
Van Buren street and Ashland avenue.
Wood and Harrison streets.
Lake and Robey streets.
Lake street and Hoyne avenue.

Madison and Robey streets.
Robey and Harrison streets.
Madison and Loomis streets.
Randolph and Elizabeth streets.
Wood and Van Buren streets.
Carroll avenue and Elizabeth street.
Loomis and Adams streets.
Van Buren street and Seeley avenue.

TWENTY-NINTH PRECINCT.

Lake street and Albany avenue.
Lake street and California avenue.
Madison and Leavitt streets.
Van Buren and Leavitt streets.
Harrison street and California avenue.
Lake street and Western avenue.
Madison street and Western avenue.
Kinzie street and Western avenue.
Jackson street and Western avenue.
Madison street and Oakley avenue.
Madison street and Hoyne avenue.
California avenue and Van Buren street.
Madison street and California avenue.
Harrison and Rockwell streets.
Lake street and Talman avenue.
Fulton street and Hoyne avenue.
Kinzie and Leavitt streets.
Fulton street and Washtenaw avenue.
Harrison street and Western avenue.
Harrison street and Irving place.
Van Buren street and Albany avenue.
Madison and Rockwell streets.
Jackson and Rockwell streets.
Van Buren street and Campbell avenue.
Sacramento avenue and Van Buren street.
Lake and Leavitt streets.
Lake street and Kedzie avenue.
Fulton and Francisco streets.
Fulton street and Oakley avenue.
Madison street and Sacramento avenue.
Kedzie avenue and Madison street.
Oakley avenue and Kinzie street.
Carroll and Sacramento avenues.

THIRTIETH PRECINCT.

West Fortieth and Harrison streets.
West Forty-eighth and Madison streets.
Park avenue and West Forty-second street.
Lake and West Forty-eighth streets.
Lake street and Hamlin avenue.
West Fortieth and Kinzie streets.
West Forty-eighth and Ontario streets.
Madison and West Forty-fourth streets.
Chicago and Hamlin avenues.
West Forty-third and Kinzie streets.
Division street and Grand avenue.
West Fortieth and Madison streets.
Homan avenue and Madison street.
West Fortieth and Lake streets.
Homan avenue and Lake street.
Harrison and West Forty-eighth streets.
Crawford avenue and Augusta street.
Harrison and West Forty-third streets.
Kinzie street and Central Park avenue.
West Forty-seventh street and Chicago avenue.
Jackson boulevard and Central Park avenue.
Adams and West Fortieth streets.
Madison street and Hamlin avenue.
Madison street and Central Park avenue.
Lake and West Forty-sixth streets.
West Fortieth street and Chicago avenue.

THIRTY-FIRST PRECINCT.

(Not opened.)

THIRTY-SECOND PRECINCT.

Leavitt and Augusta streets.
Noble and Erie streets.
California and Chicago avenues.
Hoyne avenue Erie street.
Huron and Temple streets.
Chicago avenue and Halsted street.
Green and Pratt streets.
Paulina street and Grand avenue.
Wood and Augusta streets.
Wood and Kinzie streets.
Noble and Cornell streets.
Huron street and Milwaukee avenue.
Augusta street and Ashland avenue.

Cornell street and Milwaukee avenue.
Kinzie and Desplaines streets.
Centre and Grand avenues.
Halsted street and Grand avenue.
Elston avenue and Augusta street.
Front and Carpenter streets.
Noble street and Chicago avenue.
Ashland and Chicago avenues.
Wood street and Chicago avenue.
Robey street and Chicago avenue.
Leavitt street and Chicago avenue.
Western and Chicago avenues.
Lincoln and Erie streets.
Ashland avenue and Erie street.
Centre avenue and Erie street.
Carpenter and Erie streets.
Halsted and Erie streets.
Ohio and Desplaines streets.
Morgan street and Grand avenue.
Wood street and Grand avenue.
Noble street and Grand avenue.
Kinzie and Robey streets.
Elizabeth street and Austin avenue.
Oakley and Grand avenues.
Lincoln street and Grand avenue.
Hoyne and Grand avenues.
Ohio street and Milwaukee avenue.
Ashland and Grand avenues.
Canal and Kinzie streets.
Western and Grand avenues.
Western avenue and Augusta street.
Grand avenue and Ohio street.
Robey and Augusta streets.
California avenue and Augusta street.

THIRTY-THIRD PRECINCT.

Elston avenue and Blackhawk street.
Sloan and Noble streets.
Holt avenue and Bradley street.
West North and Ashland avenues.
West North avenue and Fleetwood street.
Blackhawk and Dickson streets.
Elston and Wabansia avenues.
Division street and Milwaukee avenue.
Division street and Elston avenue.
Elston avenue and Clybourn place.

Noble street and Milwaukee avenue.
Noble street and West North avenue.
North Branch and Halsted streets.
Cherry avenue and Division street.
Blackhawk and Noble streets.
Hickory and Blackhawk streets.
Blanche and McHenry streets.
C. & N. W. R. R. and Armitage avenue.
Paulina and McReynolds streets.
Wood and Division streets.
Wood street and Armitage avenue.
Wood street and North avenue.
Thomas and Lincoln streets.
Wood street and Clybourn place.
Paulina street and Wabansia avenue.
Paulina street and Milwaukee avenue.
Wood street and Milwaukee avenue.

THIRTY-FOURTH PRECINCT.

Division street and Western avenue.
Hirsch street and Western avenue.
Division street and California avenue.
Hirsch and Rockwell streets.
Robey and Fowler streets.
Leavitt street and West North avenue.
Rockwell street and West North avenue.
Robey street and Armitage avenue.
West North and Western avenues.
Hoyne and Evergreen avenues.
Oakley and Milwaukee avenues.
Robey and Division streets.
Hoyne avenue and Churchill street.
Bloomingdale road and Kimball avenue.
North and Kedzie avenues.
Rockwell street and Bloomingdale road.
Western avenue and Bloomingdale road.
North and California avenues.
North avenue and Boulevard.
California avenue and Bloomingdale road.
Boulevard and Bloomingdale road.
North and Avers avenues.
North and Central Park avenues.
Hirsch street and Western avenue.
North and Milwaukee avenues.
Leavitt and Crystal streets.

THIRTY-FIFTH PRECINCT.

Armitage and Kimball avenues.
Hamlin and Armitage avenues.
Central Park and Milwaukee avenues.
Belmont and Milwaukee avenues.
Kimball and Fullerton avenues.
Milwaukee and Perry avenues.
California and Armitage avenues.
Leavitt street and Armitage avenue.
Leavitt and Elm streets.
Elston avenue and Asylum place.
Armitage and Milwaukee avenues.
Western and Fullerton avenues.
Logan square and Milwaukee avenue.
Boulevard and Armitage avenue.
Western avenue and Elm street.
Elston and Fullerton avenues.
Leavitt street and Fullerton avenue.
Perry and Fullerton avenues.
Milwaukee and California avenues.
Hoyne avenue and Frankfort street.
Hoffman and Diversey streets.
California avenue and Diversey street.
Elston avenue and Diversey street.
Elston and California avenues.
Diversey and Milwaukee avenues.

THIRTY-SIXTH PRECINCT.

Ash street and Irving Park boulevard.
St. Charles and Irving Park avenues.
Franklin and Everett streets.
Short and Milwaukee avenues.
West Fortieth street and North Branch of river.
Belmont and Kedzie avenues.
Elston and Lawrence avenues.
Elston and Warner avenues.
Milwaukee avenue and Montrose boulevard.
Milwaukee and Warner avenues.
Elston road and Crawford avenue.
Vernon avenue and Irving Park boulevard.
Carpenter road and Milwaukee avenue.
Forest Glenn Depot.
Norwood Park.
Edgebrook.

THIRTY-SEVENTH PRECINCT.

Armitage and Tripp avenues.
Hosmer and Grand avenues.
Ridgeland and Grand avenues.
Montclair Depot.
Austin and Grand avenues.
Grand avenue and West Fifty-sixth street.
Armitage avenue and West Forty-fourth street.
Armitage avenue and West Forty-eighth street.
Crawford and North avenues.
North avenue and West Forty-fourth street.
North avenue and West Forty-eighth street.
Fullerton avenue and West Forty-eighth street.
Bloomingdale avenue and West Forty-second street.
Grand avenue and Fifty-third court.
Grand avenue and West Fortieth street.

THIRTY-EIGHTH PRECINCT.

Wells street and Chicago avenue.
Wells and Indiana streets.
Wells and Kinzie streets.
Wells and Erie streets.
North Clark and Erie streets.
North Clark and Indiana streets.
North Clark and Division streets.
North Clark and Kinzie streets.
North Clark and Locust streets.
North Clark and Oak streets.
Wells and Oak streets.
North State and Division streets.
North State and Indiana streets.
North State street and Chicago avenue.
North State and Erie streets.
North State and Kinzie streets.
Pine street and Walton place.
Pine street and Chicago avenue.
Crosby and Elm streets.
Market and Kinzie streets.
Market and Indiana streets.
Market and Erie streets.
Oak and Rush streets.
Ontario street and the Lake Shore.
Market street and Chicago avenue.
Indiana and Kingsbury streets.
Indiana and St. Clair streets.

Division and Townsend streets.
Larrabee street and Hawthorne avenue.
Milton avenue and Locust street.
Cass and Chestnut streets.
Erie and St. Clair streets.
Erie and Kingsbury streets.
Chicago avenue and Wesson street.
Franklin and Ohio streets.
Rush and Michigan streets.
Milton avenue and Hobbie street.
Sedgwick and Oak streets.
Illinois street and the Lake Shore.
North Pier Light House.
Oak and Larrabee streets.

THIRTY-NINTH PRECINCT.

Clybourn and Cleveland avenues.
Larrabee street and Clybourn avenue.
Ritchie place and Goethe street.
Blackhawk street and Cleveland avenue.
Sedgwick and Menominee streets.
Eugenie street and Cleveland avenue.
Halsted and Willow streets.
Halsted and Division streets.
Larrabee and Willow streets.
Clark and Schiller streets.
Wells and Schiller streets.
Wells and Menominee streets.
Blackhawk street and Clybourn avenue.
Willow street and Clybourn avenue.
Wells and Division streets.
Wells street and North avenue.
Clybourn and North avenues.
Halsted and Rees streets.
State and Schiller streets.
Sedgwick and Schiller streets.
Larrabee and Division streets.
Hawthorne and North avenues.
Sedgwick and Division streets.
Clark street and North avenue.
Sedgwick street and North avenue.
Burton place and Astor street.
Smith avenue and Weed street.

FORTIETH PRECINCT.

Cleveland avenue and Wisconsin street.
Halsted street and Webster avenue.
Racine and Webster avenues.
Orchard street and Garfield avenue.
Fullerton and Southport avenues.
Clark street and North Park avenue.
Clark street and Belden avenue.
Southport avenue and Clybourn place.
Sedgwick and Centre streets.
Clybourn and Western avenues.
Clay and Fremont streets.
Centre and Larrabee streets.
Orchard street and Lincoln avenue.
Webster and Sheffield avenues.
Lincoln and Webster avenues.
Ashland and Clybourn avenues.
Racine and Clybourn avenues.
Centre street and Sheffield avenue.
Halsted and Centre streets.
Seminary and Maud avenues.
Seminary place and Garfield avenue.

FORTY-FIRST PRECINCT.

Diversey and Ashland avenues.
Dunning street and Southport avenue.
Belmont and Hoyne avenues.
Otto and Wood streets.
Wellington and Lincoln avenues.
Belmont and Clifton avenues.
Roscoe and Lincoln streets.
Roscoe and Robey streets.
Diversey avenue and Halsted street.
Western avenue and Roscoe street.
Wellington and Clybourn avenues.
Lincoln and Ashland avenues.
Montana street and Seminary avenue.
Racine and Diversey avenues.
Racine and Wrightwood avenues.
Sheffield and Lincoln avenues.
Halsted street and Wrightwood avenue.
Clark street and Wrightwood avenue.
Clark street and Diversey avenue.
Evanston avenue and Barry street.
Wellington and Sheffield avenues.

Belmont and Clybourn avenues.
 Fullerton avenue and Halsted street.
 Paulina street and Clybourn avenue.
 Diversey and Lake View avenues.

FORTY-SECOND PRECINCT.

Ashland avenue and Sulzer street.
 Clark street and Graceland avenue.
 Evanston avenue and Sulzer street.
 Wilson and Robey streets.
 Grace street and Ashland avenue.
 Graceland and Lincoln avenues.
 Southport avenue and Addison street.
 Lincoln avenue and Sulzer street.
 Buena Park Depot.
 Roscoe street and Evanston avenue.
 Clark and Addison streets.
 Evanston avenue and Wilson street.
 Addison street and Lincoln avenue.
 Evanston avenue and Grace street.
 Belmont avenue and Clark street.

FORTY-THIRD PRECINCT.

Argyle Park Depot.
 Lawrence avenue and Clark street.
 Clark street and Ridge avenue.
 North Fifty-ninth street and Lincoln avenue.
 Rosehill Depot.
 Ridge avenue and Webber street.
 Clark and North Fifty-ninth streets.
 Clark street and Homan avenue.
 Lawrence avenue and Robey street.
 Evanston avenue and North Fifty-ninth street.
 Evanston and Grand avenues.
 Bryn Mawr and Evanston avenue.
 Lakewood and Balmoral avenues.

FORTY-FOURTH PRECINCT.

(No Boxes.)

RECAPITULATION.

| | |
|----------------------------|-----|
| Total Number of Boxes..... | 912 |
| Number of Horses..... | 239 |
| Number of Wagons..... | 42 |
| Number of Ambulances..... | 6 |

OFFICE OF THE SECRETARY OF POLICE.

To J. J. Badenoch, Gen'l Supt. of Police, Chicago, Ill.

SIR:—I herewith submit to you the Annual Report of the Secretary of Police, showing the expenses of the Department for the various purposes therein expressed for the year ending December 31, 1896, together with the description and valuation of real estate and personal property in use by the Department; also the estimate of cost and expense for maintaining the Department for the year ending December 31, 1897.

INVOICE OF PROPERTY.

GENERAL HEADQUARTERS AND CENTRAL STATION.

At City Hall.

Furniture, fixtures and stationery\$4,959 00

FIRST PRECINCT.

Monroe St. and Michigan Ave., Battery "D."

Furniture, fixtures, stationery, stock and apparatus.....\$4,653 50

FIRST DIVISION.

SECOND PRECINCT.

Corner Harrison St. and Pacific Ave.

| | |
|---|-------------|
| Lots 20 and 23, block 113, School Section Addition; owned by school fund..... | |
| One two-story and basement brick station, 88.3x105.9..... | \$40,000 00 |
| Two-story brick patrol house, 24x75..... | 5,000 00 |
| Heating apparatus, two steam boilers (old)..... | 4,300 00 |
| Furniture, fixtures, stationery, stock and apparatus..... | 5,348 70 |
| Photograph gallery, with complete outfit. | 4,466 00 |
| | \$59,114 70 |

THIRD PRECINCT.

318 Twenty-second St.

| | |
|--|-------------------|
| Sub-lot 42 and E. $\frac{1}{2}$ sub-lot 41 of subdivision of lots 2, 3, 4 and 5, block 45 in C. T. Subdivision, Sec. 21, T. 39, R. 14, 36x148. | \$6,000 00 |
| One two-story brick and stone basement station house, 30x83.4 | 9,000 60 |
| One two-story frame patrol house..... | 600 00 |
| Furniture, fixtures, stationery, stock and apparatus..... | 2,488 70 |
| | <hr/> \$18,088 70 |

FOURTH PRECINCT.

2523 Cottage Grove Ave.

| | |
|--|-------------------|
| N. $\frac{1}{2}$ lot 1, block 66, in C. T. Subdivision, S. 27, T. 39, R. 14, 30x136.27. | \$10,000 00 |
| One two-story brick station house | 8,000 00 |
| One two-story brick patrol house..... | 2,500 00 |
| Furniture, fixtures, stationery, stock and apparatus..... | 2,914 40 |
| | <hr/> \$23,414 40 |

FIFTH PRECINCT.

144 and 146 Thirty-fifth St.

| | |
|--|-------------------|
| E. 40 3-12 feet of lots 12 and 13, block 6, of University Subdivision of that part of S. $\frac{1}{2}$ of N. E. fractional $\frac{1}{4}$, S. 34, T. 39, R. 14, 40 3-12x102..... | \$9,500 00 |
| One two-story brick and stone basement station house and patrol house, 40.3x102..... | 16,000 00 |
| Furniture, fixtures, stationery, stock and apparatus..... | 2,366 30 |
| | <hr/> \$27,866 30 |

SIXTH PRECINCT.

840 Thirty-fifth St.

| | |
|---|-------------------|
| Lot 42, sub-block 2 of Gallagher's subdivision, S. $\frac{1}{2}$ block 9 in C. T. Subdivision, S. 33, T. 39, R. 14, 25x136..... | \$3,000 00 |
| One two-story brick and stone basement station house... .. | 8,800 00 |
| One two-story brick and stone basement patrol house and court room.... | 8,100 00 |
| Furniture, fixtures, stationery, stock and apparatus | 2,912 70 |
| | <hr/> \$22,812 70 |

SEVENTH PRECINCT.

2913 Deering St.

| | |
|---|-------------------|
| Sub-lot 20 of Subdivision of N. 2 acres of lot 2, block 26, C. T. Subdivision, S. 22, T. 39, R. 14, 25x120..... | \$2,650 00 |
| One two-story brick and stone basement station house and patrol house, 25x115 | 12,000 00 |
| Furniture, fixtures, stationery, stock and apparatus..... | 2,648 20 |
| | <hr/> \$17,298 20 |

EIGHTH PRECINCT.

California Ave. and Thirty-eighth St.

| | |
|--|------------------|
| Corwith's resubdivision of lots 81, 120, 124, 140, 142, 150, 152, 157, in Town of Brighton, Sec. 36, T. 39, R. 13, 50x125..... | \$1,800 00 |
| One-story brick station house..... | 1,500 00 |
| Two-story frame patrol house..... | 2,000 00 |
| Furniture, fixtures, stationery, stock and apparatus..... | 1,823 46 |
| | <hr/> \$7,123 46 |

SECOND DIVISION.

TENTH PRECINCT.

Fifty-third St. and Lake Ave.

| | |
|--|-------------------|
| Sub-lot 1 of Church's Subdivision of lot 4, and S. $\frac{1}{2}$ of lot 3, block 19, in Hyde Park, Subdivision in S. E. $\frac{1}{4}$ of Sec. 11, T. 38, R. 14, 80x119x80.5x114.7..... | \$20,000 00 |
| Building..... | 48,000 00 |
| Furniture, fixtures, stationery, stock and apparatus..... | 6,879 40 |
| | <hr/> \$74,879 40 |

ELEVENTH PRECINCT.

5003 State St.

| | |
|--|------------------|
| E. 25 feet of lots 47 and 48, block 4, Derby's Subdivision, N. W. $\frac{1}{4}$ S. 10, T. 38, R. 14, 25x50 (leased)..... | .. .. |
| Building rented for station house..... | .. .. |
| Two-story frame patrol house..... | \$1,000 00 |
| Furniture, fixtures, stationery, stock and apparatus..... | 1,577 90 |
| | <hr/> \$2,577 90 |

TWELFTH PRECINCT.

Sixty-third St. and Grace Ave. (Woodlawn.)

| | |
|--|-------------------|
| Lots 19 and 20 in F. W. Green's Subdivision of lots 75, 76, 81, 82, 83 and 88 in Robertson's Subdivision of N. 25 $\frac{1}{4}$ acres of that part of E. $\frac{1}{2}$ of the N. E. $\frac{1}{4}$ of S. 23, T. 38, N. R. 14, E. of 3 P. M., lying east of Ill. Cent. tracks..... | \$10,125 00 |
| One two-story brick station house and patrol barn..... | 21,596 58 |
| Furniture, fixtures, stationery, stock and apparatus..... | 2,993 25 |
| | <hr/> \$34,714 83 |

THIRTEENTH PRECINCT.

Dobson Ave. and Kidder Court.

| | |
|--|------------------|
| S. 40 feet, lots 9 and 10, block 46, Cornell's Subdivision, S. W. $\frac{1}{4}$ Sec. 26, T. 38, R. 14, 50x100..... | \$2,000 00 |
| Two-story frame station house, 20x70..... | 2,500 00 |
| New addition to patrol barn..... | 450 00 |
| Furniture, fixtures, stationery, stock and apparatus..... | 1,614 90 |
| | <hr/> \$6,564 90 |

FOURTEENTH PRECINCT.

Kensington Ave. and Front St.

| | |
|---|------------------|
| Lot 1, block 3, Kensington, a subdivision in the S. W. $\frac{1}{4}$ Sec. 22, T. 37, R. 14, 64.4x210x27.73x213..... | \$3,000 00 |
| Two-story brick station house, 22x47..... | 1,500 00 |
| Two-story frame patrol house, 25x70..... | 1,000 00 |
| Furniture, fixtures, stationery, stock and apparatus..... | 1,757 35 |
| | <hr/> \$7,257 35 |

FIFTEENTH PRECINCT.

Eighty-ninth St. and Exchange Ave.

| | |
|---|-------------------|
| N. part lot 28, block 91, South Chicago, Subdivision by Chicago and Calumet Canal and Dock Co.'s S. E. $\frac{1}{4}$ Sec. 6, T. 37, R. 15, 92.9 on South Chicago avenue by 130 on 93rd street by 90 ft. | \$2,500 00 |
| Lots 24 and 25, block 23, Chicago and Calumet Canal and Dock Co.'s Subdivision of parts of Secs. 5 and 6, T. 37, R. 15..... | 3,500 00 |
| Building..... | 35,000 00 |
| Furniture, fixtures, stationery, stock and apparatus..... | 2,587 05 |
| | <hr/> \$43,587 05 |

SIXTEENTH PRECINCT.

N. E. Cor. One Hundred and Thirty-fourth St. and Superior Ave.

| | |
|---|------------------|
| Lot 6, block 13, Chicago and Calumet Canal and Dock Co.'s Subdivision of S. 5 acres of S. E. $\frac{1}{4}$ of N. E. $\frac{1}{4}$, Sec. 31, T. 37, R. 15, 32x118.88..... | \$1,100 00 |
| One-story and attic frame station house, 28x51..... | 1,500 00 |
| Furniture, fixtures, stationery, stock and apparatus..... | 124 00 |
| | <hr/> \$2,724 00 |

SEVENTEENTH PRECINCT.

Sixty-fourth St. and Wentworth Ave.

| | |
|---|-------------------|
| Lot 10, C. C. Division of block 2 in Skinner and Judd's Subdivision in the N. E. $\frac{1}{4}$ Sec. 21, T. 38, R. 14, 75x188..... | \$16,000 00 |
| Two-story brick and stone basement station house, 28x84..... | 13,000 00 |
| Two-story frame patrol house, 20x40..... | 2,000 00 |
| Furniture, fixtures, stationery, stock and apparatus..... | 1,990 85 |
| | <hr/> \$32,990 85 |

EIGHTEENTH PRECINCT.

Eighty-sixth and Green Sts.

| | |
|---|-------------------|
| Lot 1, block 8, Delemater & Dickman's Subdivision, Sec. 32, T. 38, R. 14, 80x125..... | \$2,500 00 |
| Two-story brick station house..... | 16,000 00 |
| Furniture, fixtures, stationery, stock and apparatus..... | 2,400 85 |
| | <hr/> \$20,900 85 |

NINETEENTH PRECINCT.

Halsted and Matteson Sts.

| | |
|--|-------------------|
| Lot 1 and the N. $\frac{1}{2}$ of lot 2, block 4, Newberry's Subdivision of N. 1,162.65 ft. of E. $\frac{1}{2}$ of N. E. $\frac{1}{4}$, Sec. 8, T. 38, R. 14, 36x125.. | \$5,500 00 |
| One two-story brick and stone basement station house, 32.8x94 | 14,500 00 |
| Two-story brick patrol house, 27.6x35..... | 2,000 00 |
| Furniture, fixtures, stationery, stock and apparatus..... | 3,138 00 |
| | <hr/> \$25,138 00 |

THIRD DIVISION.

TWENTY-FIRST PRECINCT.

Morgan and Maxwell Sts.

| | |
|--|-------------------|
| Lots 1, 2, 3 and 4, block 14, Brand's addition, Sec. 20, T. 39, R. 14, 96x100 | \$13,000 00 |
| Two-story brick and stone basement station house and patrol house, 96x100..... | 50,000 00 |
| Furniture, fixtures, stationery, stock and apparatus.... | 2,472 00 |
| | <hr/> \$65,472 00 |

TWENTY-SECOND PRECINCT.

187 Canalport Ave., near Halsted St.

| | |
|--|-------------------|
| Lot 38, block 16, in Walsh & McMullin's Subdivision, S. E. $\frac{1}{4}$, Sec. 20, T. 39, R. 14, 23x97.4x115 $\frac{1}{2}$ x26.4 $\frac{1}{2}$ | \$3,500 00 |
| Two-story brick and stone basement station house and patrol house, 26x98.5..... | 10,500 00 |
| Furniture, fixtures, stationery, stock and apparatus..... | 1,823 85 |
| | <hr/> \$15,823 85 |

TWENTY-THIRD PRECINCT.

Corner Hinman and Paulina Sts.

| | |
|---|-------------------|
| Lot 48, block 63, in Division S. 19, T. 39, R. 14, 25x125..... | \$6,000 00 |
| Two-story brick and stone basement station house and patrol house..... | 13,500 00 |
| Furniture, fixtures, stationery, stock and apparatus..... | 1,792 47 |
| | <hr/> \$21,292 47 |

TWENTY-FOURTH PRECINCT.

West Thirteenth St., near Oakley Ave.

| | |
|---|-------------------|
| Lots 78 and 79, block 7, of Crozier's Subdivision W. $\frac{1}{2}$ of S. W. $\frac{1}{4}$ Sec. 19, T. 39, R. 14, 48x119..... | \$5,000 00 |
| Two-story brick station house and patrol house, 40x60..... | 8,500 00 |
| Furniture, fixtures, stationery, stock and apparatus..... | 2,748 80 |
| | <hr/> \$16,248 80 |

TWENTY-FIFTH PRECINCT.

964 Bonney Ave., near Ogden Ave.

| | |
|---|-------------------|
| Lot 68, in Lansingh's Addition, a Subdivision of lots 5, 6, 15 and 16, and the W. 146.17 feet on lots 4 and 17 in J. H. Kedzie's Subdivision in the S. W. $\frac{1}{4}$ Sec. 23, T. 39, R. 13, 64.8x125.... | \$2,000 00 |
| Two-story brick and stone foundation station house, 29x60.... | 4,500 00 |
| One-story brick and stone foundation patrol house and cell room, 35x23..... | 2,000 00 |
| Furniture, fixtures, stationery, stock and apparatus..... | 1,251 60 |
| | <u>\$9,751 60</u> |

TWENTY-SEVENTH PRECINCT.

Desplaines St. and Waldo Place.

| | |
|---|---------------------|
| South 60 feet of lots 1, 2, 3, 4, 5, 6, 7, and E. 4 feet of lot 8, block 67, original town, 60x160..... | \$50,000 00 |
| Lots 32 and 35, original town, 34x80.8..... | 25,000 00 |
| Two-story brick and stone basement station house, 52x141.2... | 50,000 00 |
| Three-story and basement brick construction and repair shop and patrol house, 34x80..... | 10,800 00 |
| Furniture, fixtures, stationery, stock and apparatus.... | 5,485 10 |
| Furniture, fixtures, construction material and apparatus in shop..... | 2,300 00 |
| | <u>\$143,585 10</u> |

TWENTY-EIGHTH PRECINCT.

609 West Lake St.

| | |
|---|--------------------|
| E. $\frac{1}{2}$ of Lot 1 Assessor's division of lots 4 and 5, in block 49, in C. T. Subdivision Sec. 7, T. 39, R. 14, 29.91x144.5..... | \$6,500 00 |
| Two-story and basement brick station house and patrol house, 20x109.6..... | 5,000 00 |
| Furniture, fixtures, stationery, stock and apparatus..... | 2,565 00 |
| | <u>\$14,065 00</u> |

TWENTY-NINTH PRECINCT.

526 and 528 Warren Ave.

| | |
|--|--------------------|
| Lots 27, 28 and 29, L. D. Boone's addition, 74x127..... | \$8,000 00 |
| Two-story brick and stone basement station house, 35x70..... | 12,000 00 |
| Two-story frame patrol house, 30x40..... | 1,400 00 |
| Furniture, fixtures, stationery, stock and apparatus..... | 2,719 15 |
| | <u>\$24,119 15</u> |

VETERINARY HOSPITAL.

76, 78 and 80 Campbell Ave.

| | |
|---|--------------------|
| S. $\frac{1}{2}$ of lots 21 and 22 in L. D. Boone's addition, 48.5x63.5..... | \$4,000 00 |
| Two-story brick and stone basement building used as veterinary hospital, 48.5x58..... | 6,500 00 |
| Horses, fixtures and medicine in hospital..... | 4,239 10 |
| | <u>\$14,739 10</u> |

THIRTIETH PRECINCT.

4239 West Lake St.

| | |
|--|-------------------|
| Lot 62, block 3, in W. Chicago Land Company's Subdivision, Sec. 10, T. 39, R. 13, 25x180..... | \$1,950 00 |
| Two-story brick station house..... | 2,000 00 |
| Brick patrol house..... | 2,150 00 |
| Furniture, fixtures, stationery, stock and apparatus..... | 1,289 45 |
| | <u>\$7,389 45</u> |

FOURTH DIVISION.

THIRTY-SECOND PRECINCT.

233 and 235 West Chicago Ave.

| | |
|---|--------------------|
| Lots 2 and 3 and E. $\frac{1}{2}$ lot 4, block 42, in Ogden's Addition N. E. $\frac{1}{4}$ Sec. 8, T. 39, R. 14, 52.4x121..... | \$10,000 00 |
| Two-story brick and stone basement station house, 21.2x121.. | 10,800 00 |
| Two-story brick and stone basement station house (old court room), 21.7x64.4..... | 4,000 00 |
| Two-story brick patrol house, 31.5x38..... | 2,500 00 |
| Furniture, fixtures, stationery, stock and apparatus..... | 4,213 55 |
| | <u>\$31,573 55</u> |

THIRTY-THIRD PRECINCT.

99 West North Ave.

| | |
|---|--------------------|
| W. $\frac{1}{2}$ lot 69, sub-block 3 of block 18, Sheffield's Addition, Sec. 32, T. 39, R. 14, 25x125..... | \$2,500 00 |
| (Rawson street) E. $\frac{1}{2}$ lot 53, sub-block 3 of block 18, Sheffield's Addition, Sec. 32, T. 39, R. 14, 25x115..... | 1,100 00 |
| Two-story brick and stone basement station house and patrol house..... | 12,000 00 |
| (Rawson street) two-story frame station house and one-story brick patrol house..... | 800 00 |
| Furniture, fixtures, stationery, stock and apparatus..... | 3,262 80 |
| | <u>\$19,662 80</u> |

THIRTY-FOURTH PRECINCT.

637 West North Ave.

| | |
|---|--------------------|
| Lots 20 and 21, block 1, Johnson's Subdivision, S. W. $\frac{1}{4}$ Sec. 31, T. 40, R. 14, 49x130..... | \$6,500 00 |
| Two-story brick and stone basement station house and patrol house, 25x115..... | 11,730 35 |
| Furniture, fixtures, stationery, stock and apparatus..... | 2,792 60 |
| | <u>\$21,022 95</u> |

THIRTY-FIFTH PRECINCT.

1780 Milwaukee Ave.

| | |
|--|--------------------|
| Sub-lot 3 of sub-block 2, Attrill's Subdivision of lots 4 to 9, 16 to 21, 36 to 41, 48 to 53, block 2 in Stave's Subdivision, Sec. 36, T. 39, R. 14, 25x111..... | \$4,000 00 |
| Two-story frame station house and one-story frame patrol house | 4,500 00 |
| Furniture, fixtures, stationery, stock and apparatus..... | 1,747 68 |
| | <u>\$10,247 68</u> |

THIRTY-SIXTH PRECINCT.

Cor. Irving and Milwaukee Aves. (Irving Park.)

| | |
|--|-------------------|
| Town house lot, block 22, "Grayland," W. $\frac{1}{2}$ of N. W. $\frac{1}{4}$ Sec. 22, T. 40, R. 13, 226x226x160 | \$3,500 00 |
| Two-story brick station house, 30x50..... | 2,500 00 |
| Furniture, fixtures, stationery, stock and apparatus..... | 1,683 90 |
| | <u>\$7,683 90</u> |

THIRTY-SEVENTH PRECINCT.

Grand and Linden Aves. (Cragin.)

| | |
|--|-------------------|
| Lot 1 of block 1 of C. B. Hosmer's Subdivision of block 1, W. $\frac{1}{2}$ of S. E. $\frac{1}{4}$ Sec. 33, T. 40, R. 13, located at Grand avenue and Linden avenue; the lot is of irregular shape; the front on Grand avenue is 74 feet 3; the rear is 105 feet 4; on Linden avenue 52 feet 5; and the west side of lot is 79 feet 5..... | \$2,220 00 |
| One new two-story brick station house, 25x57..... | 4,000 00 |
| Lot 20, block 24, 150x173.6, Irving Park Subdivision in S. E. $\frac{1}{4}$ Sec. 15 (Artesian Well)..... | 800 00 |
| Furniture, fixtures, stationery, stock and apparatus..... | 700 00 |
| | <u>\$7,720 00</u> |

THIRTY-EIGHTH PRECINCT.

240 to 244 E. Chicago Ave.

| | |
|---|--------------------|
| Lot 17 and E. $\frac{1}{2}$ of 16, block 35, N. Wolcott's addition, Sec. 9, T. 39, R. 14, 60x130..... | \$26,000 00 |
| Three-story and basement brick and stone station house, 60x130 | 42,000 00 |
| Furniture, fixtures, stationery, stock and apparatus..... | 9,306 40 |
| | <u>\$77,306 40</u> |

THIRTY-NINTH PRECINCT.

Larrabee St. and North Ave.

| | |
|---|--------------------|
| S. 20 feet of lot 5 and the S. 50 feet of sub-lot 1 of Subdivision of lot 6, block 1, Sheffield's Addition, N. E. $\frac{1}{4}$ Sec. 32, T. 40, R. 14, 74x175 | \$12,000 00 |
| Three-story brick and stone basement station house (third story extending over Engine Co. No. 4)..... | 16,500 00 |
| Two-story brick patrol house, 24x50..... | 2,000 00 |
| Furniture, fixtures, stationery, stock and apparatus | 2,984 05 |
| | <u>\$33,484 05</u> |

FORTIETH PRECINCT.

958 and 960 N. Halsted St.

| | |
|---|--------------------|
| Lots 13 and 14, sub-block 1 of N. $\frac{1}{2}$ block 4, Sheffield's Addition, N. E. $\frac{1}{4}$ Sec. 32, T. 40, R. 14, 50x125..... | \$9,000 00 |
| Two-story brick and stone basement station house and patrol house, 50x118..... | 16,000 00 |
| Furniture, fixtures, stationery, stock and apparatus.... | 2,835 90 |
| | <u>\$27,835 90</u> |

FORTY-FIRST PRECINCT.

Sheffield and Diversey Aves.

| | |
|---|--------------------|
| Lot 85 of Edson's Subdivision of E. half of lots 10 and 13 in C. T. Subdivision, S. E. $\frac{1}{4}$ Sec. 29, T. 40, R. 14, 25x140..... | \$3,000 00 |
| Two-story brick and stone basement station house and patrol house, 24x85..... | 9,500 00 |
| One-story frame barn..... | 100 00 |
| Furniture, fixtures, stationery, stock and apparatus..... | 2,224 50 |
| | <u>\$14,824 50</u> |

FORTY-SECOND PRECINCT.

N. Halsted and Addison Sts.

| | |
|--|--------------------|
| S. 150 feet of E. 150 feet of block 16 in Laffin Smith and Dyer's Subdivision of N. E. $\frac{1}{4}$ Sec. 20, T. 40, R. 14, 150x150..... | \$15,000 00 |
| Two-story brick and stone basement station house, 41x74..... | 10,000 00 |
| One-story frame patrol house, 14x37..... | 150 00 |
| One two-story frame barn, 22x46..... | 800 00 |
| Furniture, fixtures, stationery, stock and apparatus..... | 1,469 10 |
| | <u>\$27,419 10</u> |

FORTY-THIRD PRECINCT.

Palmer and Foster Aves.

| | |
|--|--------------------|
| Lots 25 and 26, block of Nic. Miller's Subdivision, S. W. $\frac{1}{4}$ of N. E. $\frac{1}{4}$ Sec. 7, T. 40, R. 14, 58x125..... | \$2,000 00 |
| Two-story frame station house and patrol barn, 36x122..... | 8,000 00 |
| Furniture, fixtures, stationery, stock and apparatus..... | 1,967 75 |
| | <u>\$11,967 75</u> |

FORTY-FOURTH PRECINCT.

N. Clark St. and Jackson Ave.

| | |
|---|--------------------|
| Lots 7 and 8 of block 17, lying in Subdivision of that part east of the C. & N.-W. R. R. tracks south of the Indiana boundary line in Sec. 30, 41, 14, and all of the N. E. $\frac{1}{4}$ and that part N. W. $\frac{1}{4}$ of Rogers Park, Township of Evanston, W. 60 feet deep, 38 feet front..... | \$12,000 00 |
| Vacant lot adjoining, 37 feet front, 60 feet deep..... | 8,000 00 |
| Two-story-and-half basement brick station house, 38x42..... | 4,000 00 |
| Furniture, fixtures, stationery, stock and apparatus..... | 869 25 |
| | <u>\$24,869 25</u> |

TELEGRAPH DEPARTMENT.

| | |
|---------------------------------|-------------|
| Value of patrol boxes, etc..... | \$67,670 00 |
|---------------------------------|-------------|

REAL ESTATE OCCUPIED FOR POLICE PURPOSES.

| Div. | Location. | Description. | Sub-lot. | Lot. | Block | Size. | Valuation. |
|------|--|--|--------------------------|--------------------------|-------|-----------------------|-------------|
| 1 | City Hall. | School Sec. Add. Owned by School Fund..... | | | | | |
| 1 | 1 Battery "D" | | | | | | |
| 1 | 2 Harrison st. & Pacific av | C. T. Subdiv. S. 21, T. 39, R. 14. . . | 42 & E. $\frac{1}{2}$ 41 | 2, 3, 4 and 5 | 45 | 36x148 | \$ 6,000 00 |
| 1 | 3 318 E. 22nd St. | | N. $\frac{1}{2}$ | 1 | 66 | 30x136.27 | 10,000 00 |
| 1 | 4 2523 Cottage Grove av. . . | University Subd. S. 34, T. 39, R. 14 | E. 40 3-12 | 12 and 13 | 6 | 40 3.12x102 | 9,500 00 |
| 1 | 5 144 and 146 35th st. | | feet. | | | | |
| 1 | 6 844 35th st. | Gallagher's Subdiv. S. $\frac{1}{4}$ of block 9, in C. T. Subd. S. 23, T. 39, R. 14 | ..... | 42 | 2 | 25x136 | 3,000 00 |
| 1 | 7 2913 Deering st. | C. T. Subdiv. S. 29, T. 39, R. 14. . | 20 | 2 | 26 | 25x120 | 2,650 00 |
| 1 | 8 3813 California av. | Corwith's re-subdiv. of lots 81 to 120, 124 to 140, 152 to 157, 144 to 150 of W. $\frac{1}{2}$ S. E. $\frac{1}{4}$ ..... | ..... | 27 and 28 | 14 | 50x125 | 1,800 00 |
| 2 | 10 53rd st. and Lake av. . . | Sub-lot 1 of Church's Subd. of lot 4 and S. $\frac{1}{4}$ of lot 3 in Hyde Park Subdiv. S. E. $\frac{1}{4}$ S. 11, T. 38, R. 14 | 1 | 4 and $\frac{1}{2}$ of 3 | 19 | 80x119 x 80.5 x 114.7 | 20,000 00 |
| 2 | 11 5003 State st. | Derby's Subd. of S. W. $\frac{1}{4}$ of N. W. $\frac{1}{4}$ S. 10, T. 38, R. 14, leased ground | E. 25 ft. | 47 and 48 | ..... | 25x50 | ..... |
| 2 | 12 63rd st. and Grace ave. (Woodlawn)..... | Lots 19 and 20 in F. W. Green's Subdiv. of lots 75, 76, 81, 82, 83 and 88 in Robertson's Subd. of N. 25 $\frac{1}{2}$ acres of that part of E. $\frac{1}{4}$ of the N. E. $\frac{1}{4}$ of S. 23, T. 28, N. R. 14, E. of 3d P. M., lying east of I. C. R. R. tracks..... | ..... | 19 and 20 | ..... | 75x120 | 10,125 00 |
| 2 | 13 Grand Crossing, cor. Dobson av. and Kidder st | Cornell's Subdiv. S. W. $\frac{1}{4}$ S. 26, T. 38, R. 14..... | S. 40 ft. | 9 and 10 | 46 | 50x100 | 2,000 00 |

REAL ESTATE OCCUPIED FOR POLICE PURPOSES—Continued.

| Div. | Location. | Description. | Sub-lot. | Lot. | Block | Size. | Valuation. |
|------|--|---|----------|--------------------------|-------|--|-----------------------------------|
| 214 | Kensington av..... | Kensington, a subdiv. in S. W. $\frac{1}{4}$ S. 22, T. 37, R. 14..... | ..... | 1 | 3 | 64.4x210x 27.73x213 | \$ 3,000 00 |
| 215 | Cor. S. Chicago av. and 93rd st. | Chicago & Calumet Canal & Dock Co.'s Subdiv. in S. E. $\frac{1}{4}$ S. 6, T. 37, R. 15, So. Chicago..... | N. part. | 28 | 91 | 92.9x130x90 | 2,500 00 |
| 215 | Corner 89th st. and Ex- change av | Chicago & Calumet Canal & Dock Co.'s Subd. of parts of S. 5 and 6, T. 37, R. 15..... | ..... | 24 and 25 | 23 | 55x138.5 | 3,500 00 |
| 216 | Hegewisch, cor. 134th st. and Superior av.... | Chicago & Calumet Canal & Dock Co.'s Subdiv. of S. 5 acres of S. E. $\frac{1}{4}$ of N. E. $\frac{1}{4}$ S. 31, T. 37, R. 15 ..... | ..... | 6 | 13 | 32x118.88 | 1,100 00 |
| 217 | Wentworth av..... | County Clerk's Subdiv. in 'Shid- more & Judd's Subdiv. in N. E. $\frac{1}{4}$ Sec. 21, T. 38, R. 14..... | ..... | 10 | 2 | 75x188 | 16,000 00 |
| 218 | Cor. 85th and Green sts. | Delemater & Dickman's Subdiv. S. 32, T. 38, R. 14..... | ..... | 1 | 8 | 80x125 | 2,500 00 |
| 219 | Cor. Matteson & Halsted sts..... | Newberry's Subd. of N. 1162, 65 ft of E. $\frac{1}{2}$ of N. E. $\frac{1}{4}$ Sec. 8, T. 38, R. 14 ..... | ..... | 1 and N. $\frac{1}{2}$ 2 | 4 | 36x125 | 5,500 00 |
| 321 | Cor. Morgan & Maxwell sts..... | Brand's Add. S. 20, T. 39, R. 14.. Walsh & McMullen's Subdiv. S. E. $\frac{1}{4}$ Sec. 20, T. 39, R. 14..... | ..... | 1, 2, 3 and 4 | 14 | 96x100 23x97.4x 111.5x26.4 $\frac{1}{2}$ 25x125 | 13,000 00 3,500 00 6,000 00 |
| 322 | Canalport ave..... | Division of S. 19, T. 39, R. 14..... | ..... | 48 | 63 | 48x119 | 5,000 00 |
| 323 | Hinman & Paulina sts. | Crozier's Subdiv. W. $\frac{1}{2}$ of S. W. $\frac{1}{4}$ S. 19, T. 39, R. 14..... | ..... | 78 and 79 | 7 | 64.8x125 | 2,000 00 |
| 324 | W. 13th st. & Oakley av | J. H. Kedzie's Subdiv. in Lan- sing's Add., S. 23, T. 39, R. 13. | ..... | 68 | ..... |  |  |
| 325 | 964 Bonney ave..... |  | ..... |  |  |  |  |

REAL ESTATE OCCUPIED FOR POLICE PURPOSES—Continued.

| Div. | Prec. | Location. | Description. | Sub-lot. | Lot. | Block | Size. | Valuation. |
|------|-------|------------------------------|--|--------------------|----------------------------|-------|---------------|-------------|
| 3 27 | | Desplaines st. & Waldo pl. | Original Town, N. 34. | S. 60 | 1-7 & E $\frac{1}{2}$ of 8 | 67 | 60x160 | \$50,000 00 |
| 3 28 | 609 | W. Lake st. | C. T. Subdiv. S. 7, T. 39, R. 14. | E. $\frac{1}{2}$ 1 | | 49 | 30x145 | 6,500 00 |
| 3 29 | 526 | & 528 Warren av. | L. D. Boone's Add. S. 12, T. 39, R. 13 | | 27, 28 & 29 | | 74x127 | 8,000 00 |
| 3 29 | 76 | 78 & 80 Campbell av. | L. D. Boone's Add. S. 12, T. 39, R. 13 | | S $\frac{1}{2}$ 21 & 22 | | 48.5x63.5 | 4,000 00 |
| 3 30 | 4239 | W. Lake st. | W. Chicago Land Co.'s Subdiv. | | | | | |
| 4 32 | 233 | W. Chicago av. | S. 10, T. 39, R. 13. | | 62 | 3 | 25x180 | 1,950 00 |
| 4 33 | 99 | W. North av. (Rawson st.) | Ogden's Add. N. E. $\frac{1}{2}$ S. 38, T. 39, R. 14. | | 2, 3 & E $\frac{1}{2}$ 4 | 42 | 52.4x121 | 10,000 00 |
| 4 33 | 99 | W. North av. (Rawson st.) | Sheffield's Add. S. 32, T. 39, R. 14. | | W. $\frac{1}{2}$ of 69 | 18 | 25x125 | 1,100 00 |
| 4 34 | 637 | W. North av. | Sheffield's Add. S. 32, T. 39, R. 14 | | E. $\frac{1}{2}$ of 53 | 18 | 25x115 | 2,500 00 |
| 4 35 | 1768 | Milwaukee av. | Johnson's Subdiv. N. W. $\frac{1}{2}$ S. 31, T. 40, R. 14. | | 20 and 21 | 1 | 49x130 | 6,500 00 |
| 4 36 | | Irving and Milwaukee av. | Attrill's Subd. of parts of blocks 2, 3 and 5, of Stav's Subd. of N. E. $\frac{1}{2}$ S. 36, T. 40, R. 13. | | | 2 | 25x111 | 4,000 00 |
| 4 37 | | Cragin. | Gray's Subdiv. S. 22, T. 40, R. 14 | | 2 | 22 | 226x226x160 | 3,500 00 |
| 4 37 | | Cragin. | Homer's Subdiv. of Cragin. | S. lot of 1 | | 1 | 74.3 x 105.4x | |
| 4 38 | 240 | E. Chicago av. | Irving Park Subdiv. in S. E. $\frac{1}{2}$ S. 15, artesian well. | | 20 | 24 | 52.65x79.5 | 2,220 00 |
| 4 39 | | Larrabee st. & North av. | Walcott's Add. S. 9, T. 39, R. 14. | | 17 & E. $\frac{1}{2}$ 16 | 35 | 150x173.6 | 800 00 |
| 4 39 | | Larrabee st. & North av. | Sheffield's Add. S. 33, T. 40, R. 14 | E. 20 | | 1 | 60x130 | 26,000 00 |
| 4 40 | 958 | N. Halsted st. | Sheffield's Add. S. 33, T. 40, R. 14 | E. 20 of 1 | 5, 6 and 7 | 1 | 20.6x116 | 12,000 00 |
| 4 41 | | Sheffield, near Diversey av. | Sheffield's Add. Sub-block 1. | 1 | 13 and 14 | 4 | 24x50 | 9,000 00 |
| | | | Edson's Subdiv. of E. $\frac{1}{2}$ of lots 10 and 13 of C. T. Subdiv. of S. E. $\frac{1}{2}$ Sec. 29, T. 40, R. 14. | | 85 | | 50x125 | 3,000 00 |

REAL ESTATE OCCUPIED FOR POLICE PURPOSES—Continued.

| Div. | Prec. | Location. | Description. | Sub-lot. | Lot. | Block | Size. | Valuation. |
|------|-------|---------------------------------------|--|----------|-----------|-------|---------|---------------------|
| 442 | | Halsted & Addison sts.. | S. 150 feet of E. 150 feet in Laffin Smith & Dyer's Subdiv. of N.E. $\frac{1}{4}$ S. 20, T. 40, R. 14..... | | | 16 | 150x150 | \$15,000 00 |
| 443 | | Palmer and 59th sts.... | Nie Miller's Subdiv. S. W. $\frac{1}{4}$ of N. E. $\frac{1}{4}$ S. 7, T. 46, R. 14..... | | 25 and 26 | 7 | 58x125 | 2,000 00 |
| 444 | | Rogers Park. | Lots 7 and 8, block 17, in Subdiv. of that part of E. of C.&N.W.R. R. tracks S. of Indiana boundary line in S. 30, 41, 14, and all the N. E. $\frac{1}{4}$ of that part N. W. $\frac{1}{4}$ of Rogers Park, Township of Evanston, 38x60 feet and vacant lot adjoining..... | | 7 and 8 | 17 | ..... | 12,000 00 |
| | | Repair shop, Union and Eagle sts..... | Original Town..... | | 32 and 35 | 65 | 34x80.8 | 25,000 00 |
| | | | Total..... | | | | | <u>\$333,745 00</u> |

BUILDINGS OCCUPIED FOR POLICE STATIONS.

| | Location. | Kind of Building. | Size. | Valuation. |
|-----------------|---|--|----------|--------------|
| Cent'l Division | | | | |
| Cent. Station | City Hall..... | Two-story and basement brick Station House..... | 88.3x105 | \$ 40,000 00 |
| 1st Precinct. | Battery "D," Monroe street and Michigan avenue..... | Two-story brick Patrol House..... | 24x75 | 5,000 00 |
| 1st Division. | | | | |
| 2d Precinct.. | Harrison street and Pacific avenue. | Two-story brick and stone basement Station House..... | 30x83.4 | 9,000 00 |
| 2d " | Harrison street and Pacific avenue. | Two-story frame Patrol House..... | 20x84 | 600 00 |
| 3d " | 318 East Twenty-second street..... | Two-story brick Station House..... | 26.1x32 | 8,000 00 |
| 3d " | 2523 Cottage Grove avenue..... | Two-story brick Patrol House..... | 40.3x102 | 2,500 00 |
| 4th " | 2523 Cottage Grove avenue..... | Two-story brick and stone basement Station House and Patrol House..... | 35.3x102 | 16,000 00 |
| 5th " | 144 and 146 Thirty-fifth street..... | Two-story brick and stone basement Station House..... | 22x116 | 8,800 00 |
| 6th " | 844 Thirty-fifth street..... | Two-story brick and stone basement Patrol House and Court Room..... | 25x115 | 8,100 00 |
| 6th " | 844 Thirty-fifth street..... | Two-story brick and stone basement Station House and Patrol House..... | ..... | 12,000 00 |
| 7th " | 2913 Deering street..... | One-story brick Station House..... | 30x50 | 1,500 00 |
| 8th " | 3813 California avenue..... | Two-story frame Patrol House..... | 24x36 | 2,000 00 |
| 8th " | 3813 California avenue..... | Two-story frame Patrol House..... | ..... | 48,000 00 |
| 2d Division. | | | | |
| 10th " | Fifty-third street and Lake avenue. | Three-story brick Building rented for Station House, two story frame Patrol House..... | ..... | 1,000 00 |
| 11th " | 5003 State street..... | Three-story brick.. | 25x50 | 21,596 58 |
| 12th " | Woodlawn..... | Two-story frame Station House..... | 20x70 | 2,500 00 |
| 13th " | Dobson avenue and Kidder court... | Patrol barn..... | ..... | 450 00 |
| 13th " | ..... | Two-story brick Station House..... | 22x47 | 1,500 00 |
| 14th " | Kensington avenue and Front street | Two-story brick Station House..... | ..... | ..... |

DEPARTMENT OF POLICE.

BUILDINGS OCCUPIED FOR POLICE STATIONS—Continued.

| | Location. | Kind of Building. | Size. | Valuation. |
|---------------|---|--|----------|-------------|
| 2d Division. | | | | |
| 14th Precinct | Kensington avenue and Front street | Two-story frame Patrol House..... | 25x70 | \$ 1,000 00 |
| 15th " | South Chicago avenue and Ninety-third street..... | Three-story brick..... | 52x138 | 35,000 00 |
| 16th " | One Hundred and Thirty-fourth street and Superior avenue..... | One-story and attic frame Station House | 28x51 | 1,500 00 |
| 17th " | Sixty-fourth street and Wentworth avenue..... | Two-story brick and stone basement Station House..... | 28x84 | 13,000 00 |
| | | Two-story frame Patrol House..... | 20x40 | 2,000 00 |
| 18th " | Eighty-sixth and Green streets..... | Two-story brick Station and barn..... | ..... | 16,000 00 |
| 19th " | Matteson and Halsted streets..... | Two-story brick and stone basement Station House..... | 32.8x94 | 14,500 00 |
| 3d Division. | | | 27.6x35 | 2,000 00 |
| 21st Precinct | Matteson and Halsted streets..... | Two-story brick Patrol House..... | | |
| | Morgan and Maxwell streets..... | Two-story brick and stone basement Station House and Patrol House... | 96x100 | 50,000 00 |
| 22d " | 187 Canalport avenue..... | Two-story brick and stone basement Station House and Patrol House... | 23x98.5 | 10,500 00 |
| 23d " | Hinman and Paulina streets..... | Two-story brick and stone basement Station House and Patrol House... | 25x30 | 13,500 00 |
| 24th " | West Thirtieth street and Oakley avenue..... | Two-story brick Station House and Patrol House..... | 40x60 | 8,500 00 |
| 25th " | 964 Bonney avenue..... | Two-story brick and stone foundation Station House..... | 29x60 | 4,500 00 |
| 25th Precinct | 964 Bonney avenue..... | One-story brick and stone foundation Patrol House and Cell Room..... | 35x23 | 2,000 00 |
| 27th " | Desplaines street and Waldo place.. | Two-story brick and stone basement Station House..... | 52x141.2 | 50,000 00 |

BUILDINGS OCCUPIED FOR POLICE STATIONS—Continued.

| | Location. | Kind of Building. | Size. | Valuation. |
|---------------|-------------------------------------|---|----------|--------------|
| 3d Division. | | | | |
| 27th Precinct | Union and Eagle streets..... | Three-story and basement brick Construction Repair Shop, Patrol House | 34x80 | \$ 10,800 00 |
| 28th | 609 West Lake street..... | Two-story and basement brick Station House and Patrol House | 20x109.6 | 5,000 00 |
| 29th | 526 and 528 Warren avenue..... | Two-story brick and stone basement Station House..... | 35x70 | 12,000 00 |
| 29th | 526 and 528 Warren avenue..... | Two-story frame Patrol and Store House | 30x40 | 1,400 00 |
| 29th | 76, 78 and 80 Campbell avenue..... | Two-story brick and stone basement Veterinary Hospital | 48.5x58 | 6,500 00 |
| 30th | 4239 West Lake street..... | Two-story brick Station House..... | ..... | } 4,150 00 |
| 30th | 4239 West Lake street | Two-story frame Patrol House..... | ..... |  |
| 4th Division. | | | | |
| 32d Precinct | 233 West Chicago avenue..... | Two-story brick and stone basement Station House..... | 21.2x121 | 10,800 00 |
| 32d | 233 West Chicago avenue..... | Two-story brick and stone basement Station House and Court Room.... | 21.2x121 | 4,000 00 |
| 32d | 233 West Chicago avenue..... | Two-story brick Patrol House..... | 31.5x38 | 2,500 00 |
| 33d | 99 West North avenue..... | Two-story brick and stone basement Station House and Patrol House.... | ..... | 12,000 00 |
| 33d | 71 Rawson street..... | Two-story frame Station House and one-story brick Patrol House..... | ..... | 800 00 |
| 34th | 637 West North avenue..... | Two-story brick and stone basement Station House and Patrol House.... | 25x115 | 11,730 35 |
| 35th | 1780 Milwaukee avenue..... | Two-story frame Station House and one-story frame Patrol House..... | 24x72 | } 4,500 00 |
| 36th | Irving and Milwaukee avenues..... | Two-story brick Station House..... | 24x32 | |
| 37th | Grand avenue..... | Two-story brick Station House..... | 30x50 | 2,500 00 |
| 38th | East Chicago avenue, near Clark st. | Two-story brick..... | ..... | 4,300 00 |
| | | Three-story brick and stone basement Station House..... | 60x130 | 42,000 00 |

BUILDINGS OCCUPIED FOR POLICE STATIONS—Continued.

| | Location. | Kind of Building. | Size. | Valuation. |
|---------------|--------------------------------------|--|---------|--------------|
| 4th Division. | | | | |
| 39th Precinct | Larrabee street and North avenue.. | Three-story brick and stone basement Station House, third story extending over Engine Company No. 4..... | 20.6x66 | \$18,500 00 |
| 39th | Larrabee street and North avenue.. | Two-story brick Patrol House..... | 44x66 | |
| 40th | 958 and 960 North Halsted street... | Two-story brick and stone basement Station House and Patrol House..... | 24x50 | |
| 41st | Sheffield, near Diversey avenue.... | Two-story brick and stone basement Station House and Patrol House..... | 50x118 | 16,000 00 |
| 41st | Sheffield, near Diversey avenue..... | One-story frame Patrol House..... | 24x85 | 9,600 00 |
| 42d | Halsted and Addison streets..... | Two-story brick and stone basement Station House..... | ..... |  |
| 42d | ..... | One two-story frame barn..... | 41x74 | 10,000 00 |
| 42d | Halsted and Addison streets..... | One-story frame Patrol House..... | 22x46 | 800 00 |
| 43d | Fifty-ninth and Palmer avenue.... | Two-story brick..... | 14x37 | 150 00 |
| 44th | Rogers Park..... | Two-story brick..... | 36x122 | 8,000 00 |
| | | | 38x42 | 4,000 00 |
| | Total for buildings.. | | | \$614,576 93 |

RECAPITULATION.

| | |
|---|-----------------------|
| Total value of Real Estate..... | \$333,745 00 |
| Total value of Buildings..... | 614,576 93 |
| Total value of Stock, Supplies and Apparatus..... | 192,148 51 |
| | <u>\$1,140,470 44</u> |

EXPENSES OF THE DEPARTMENT—1896.

| | Real Estate and Bldgs. | Rents. | Repairs of Stations. | Fuel. | Gas. | Furniture and Repairs. | Supplies. | Incidentals. | Constr., Stock and Appts. | Forage and Horse Shoeing. | Printing and Stationery. | Secret Service. | Salaries. | Totals. |
|-------------------|------------------------|------------|----------------------|-------------|-------------|------------------------|-------------|--------------|---------------------------|---------------------------|--------------------------|-----------------|----------------|----------------|
| Central..... | | \$32 50 | | | | \$244 10 | \$1 218 10 | \$1 355 34 | | \$32 10 | \$272 01 | | \$120,493 34 | \$23,067 99 |
| 1st Precinct..... | | | | \$111 02 | \$438 40 | 69 07 | 1 663 12 | 961 05 | \$0 40 | 1 444 40 | 2 15 | | 359,027 42 | 361,717 03 |
| 2d..... | | 6,000 00 | | 203 83 | 1,217 38 | 213 52 | 1,593 98 | 728 81 | | 1,499 90 | 42 22 | | 145,399 12 | 157,246 76 |
| 3d..... | | | | 203 60 | 302 48 | 94 10 | 22 91 | 268 15 | | 668 99 | | | 71,711 86 | 73,272 00 |
| 4th..... | | | \$118 00 | 216 50 | 291 20 | 122 96 | 408 06 | 295 83 | | 789 32 | 2 35 | | 90,549 85 | 92,794 17 |
| 5th..... | \$347 09 | | | 330 46 | 407 20 | 51 09 | 233 11 | 171 09 | | 690 39 | | | 75,986 25 | 78,217 28 |
| 6th..... | | | 135 32 | 378 10 | 504 00 | 172 30 | 216 46 | 188 11 | | 739 36 | 5 43 | | 71,359 76 | 73,648 84 |
| 7th..... | | | 90 60 | 221 04 | 258 00 | 8 50 | 119 75 | 223 96 | | 657 11 | | | 40,291 94 | 50,870 90 |
| 8th..... | 115 48 | | | 109 75 | | 12 30 | 59 65 | 165 72 | | 572 62 | | | 30,534 64 | 31,570 06 |
| 10th..... | | | 15 00 | 583 40 | 977 42 | 295 81 | 285 03 | 778 96 | | 1,640 20 | 193 25 | | 117,363 64 | 122,132 71 |
| 11th..... | | 750 00 | 35 00 | 143 20 | 371 92 | 55 16 | 239 44 | 83 29 | 13 53 | 739 54 | 85 | | 88,641 35 | 91,173 24 |
| 12th..... | | | 144 40 | 441 43 | 150 77 | 194 93 | 289 67 | 62 85 | | 642 01 | | | 65,880 20 | 68,228 26 |
| 13th..... | | | 20 00 | 180 73 | 148 97 | 9 18 | 235 79 | 90 85 | | 600 70 | | | 46,113 74 | 47,849 96 |
| 14th..... | | | 78 04 | 254 54 | 148 96 | 6 65 | 168 40 | 114 76 | 5 40 | 497 29 | | | 33,986 97 | 35,261 01 |
| 15th..... | | | 24 00 | 559 76 | 760 94 | 126 87 | 873 39 | 303 33 | | 577 90 | 1 60 | | 62,462 19 | 65,909 97 |
| 16th..... | | | 25 40 | 91 00 | 442 52 | 134 00 | 553 19 | 108 95 | | 649 65 | | | 99,070 01 | 101,071 73 |
| 17th..... | | | | 618 94 | 199 48 | 22 79 | 131 43 | 120 01 | | 649 65 | | | 38,336 54 | 40,124 29 |
| 18th..... | 36 75 | 120 00 | 227 75 | 664 24 | 395 60 | 171 95 | 982 34 | 212 66 | 17 74 | 1,397 64 | | | 108,643 79 | 112,815 27 |
| 19th..... | | | 206 40 | 583 84 | 987 80 | 138 75 | 531 61 | 407 96 | | 769 71 | 3 00 | | 146,772 56 | 150,419 06 |
| 21st..... | 7 97 | | | 233 10 | 154 70 | 5 00 | 83 91 | 174 96 | | 460 81 | | | 35,055 71 | 36,176 16 |
| 22d..... | | | | 202 80 | 212 60 | 20 95 | 38 57 | 287 20 | | 596 78 | | | 62,780 46 | 64,145 80 |
| 23d..... | | | | 202 00 | 197 80 | 15 50 | 57 13 | 397 30 | | 798 33 | 60 | | 39,817 96 | 40,876 83 |
| 24th..... | | | | | | | 27 24 | 263 13 | | 394 15 | | | 139,739 66 | 150,295 88 |
| 25th..... | 49 75 | 1,389 83 | 80 00 | 916 57 | 1,383 60 | 206 38 | 1,194 57 | 1,185 34 | | 3,866 76 | | | 80,109 21 | 81,570 45 |
| 26th..... | 387 77 | | 25 00 | 221 90 | 208 20 | 68 68 | 98 85 | 275 23 | | 627 21 | | | 83,088 59 | 85,502 03 |
| 28th..... | 90 03 | | | 380 51 | 238 60 | 20 75 | 67 75 | 370 81 | | 1,199 06 | | | 58,525 65 | 59,575 65 |
| 29th..... | 49 23 | | | 217 69 | 104 00 | 20 75 | 51 20 | 230 65 | | 3,376 51 | | | 84,020 47 | 91,957 89 |
| 30th..... | 63 22 | | | 447 90 | 1,047 20 | 237 55 | 555 76 | 252 53 | | 1,333 53 | 1 50 | | 46,738 05 | 48,125 61 |
| 31d..... | | | | 239 53 | 197 20 | 47 65 | 50 09 | 265 84 | | 488 86 | | | 53,503 35 | 55,918 82 |
| 32d..... | | | | 275 61 | 222 40 | 25 42 | 25 42 | 236 52 | | 651 39 | | | 52,968 52 | 54,493 24 |
| 33th..... | | | | 98 50 | 198 10 | 47 00 | 127 37 | 320 00 | 6 90 | 609 45 | 40 | | 29,517 10 | 31,303 37 |
| 34th..... | | | | 193 80 | | 191 17 | 122 22 | 184 84 | | 557 74 | 12 94 | | 16,586 52 | 16,947 16 |
| 35th..... | | 150 00 | 353 36 | 119 75 | | | 57 41 | 183 48 | | | | | 115 012 52 | 120,065 80 |
| 36th..... | | | | 615 23 | 982 50 | 91 03 | 1,016 34 | 462 25 | 2 70 | 1,626 04 | 37 19 | | 54,341 65 | 55,556 94 |
| 37th..... | | 220 00 | | 241 39 | 239 00 | 46 58 | 25 36 | 150 27 | | 512 40 | | | 45,076 57 | 46,891 40 |
| 38th..... | | | | 288 30 | 225 80 | 27 74 | 244 08 | 329 06 | | 639 34 | | | 55,120 36 | 56,874 62 |
| 41st..... | 58 50 | | | 149 54 | 183 00 | 147 35 | 347 03 | 217 72 | | 699 52 | | | 33,453 29 | 35,037 21 |
| 42d..... | | | | 230 91 | 145 20 | 154 30 | 96 96 | 279 77 | | 672 78 | | | 31,482 49 | 32,623 95 |
| 43d..... | | | | 225 55 | 201 00 | 12 30 | 92 44 | 120 87 | 72 60 | 406 70 | | | 13,819 00 | 14,454 74 |
| 44th..... | 76 14 | | | 104 60 | 89 40 | 13 50 | 32 18 | 229 63 | | 89 99 |  |  | ..... | 3,636 92 |
| Veter Hosp..... | | | | 51 40 | 189 40 | 27 30 | 585 05 | 31 03 | 5,214 23 | 2,717 74 | 34 00 | | 127,431 05 | 177,333 80 |
| Gen'l Acct..... | 1,069 73 | 60 00 | | 1,547 25 | 212 73 | 3,381 65 | 16,450 45 | 3,973 11 | | 1,961 81 | 7,433 26 | 8,598 53 | ..... | ..... |
| Totals..... | \$2,351 66 | \$8,742 33 | \$2,085 59 | \$13,624 11 | \$15,169 87 | \$0,943 15 | \$29,773 84 | \$16,572 31 | \$5,333 50 | \$36,601 94 | \$8,042 75 | \$8,598 53 | \$3,150,569 19 | \$3,304,308 77 |

FINANCIAL RECAPITULATION.

POLICE FUND.

| | |
|--|----------------|
| <i>Cr.</i> | |
| By amount appropriated for 1896..... | \$3,352,810 00 |
| By amount for special details..... | 20,771 24 |
| By amount of warrants deposited back | 1,003 99 |
| By amount sale of old iron, horses, wagons, etc. | 622 41 |
| By amount material used in repair of court rooms and dog pound..... | 532 30 |
| | \$3,375,739 94 |
| <i>Dr.</i> | |
| To salary warrants drawn..... | \$3,150,569 19 |
| To miscellaneous expenses | 153,739 58 |
| | \$3,304,308 77 |
| Balance deposited back in General Fund..... | \$71,431 17 |

POLICE PENSION FUND.

| | |
|---|--------------|
| Balance on hand January 1, 1896..... | \$ 5,425 43 |
| Credit 1 per cent of salary of police officers..... | 28,348 63 |
| Credit fines collected..... | 3,819 58 |
| Credit from General Fund..... | 125,000 00 |
| Credit warrants drawn and deposited back..... | 1,287 49 |
| Credit sale of goods by Custodian..... | 12 52 |
| | \$163,893 65 |
| Debit pension warrants drawn..... | 147,055 74 |
| Balance on hand December 31, 1896..... | \$16,837 91 |

POLICE LIFE AND HEALTH INSURANCE FUND.

| | |
|---|----------|
| Balance on hand December 31, 1895..... | \$522 57 |
| Dr. To warrant drawn in favor of Sergeant Wm. Saur..... | 100 00 |
| Balance on hand December 31, 1896..... | \$422 57 |

Respectfully submitted,

A. F. CAMPBELL, *Secretary.*

ESTIMATE.

Of the Cost and Expense of Providing for and Maintaining the Department of Police during the fiscal year ending December 31, 1897, made by the Superintendent and submitted by the Comptroller.

HON. O. D. WETHERELL, City Comptroller.

SIR:—I have the honor to submit an estimate of the cost of providing for and maintaining the Department of Police during the fiscal year ending December 31, A. D. 1897, viz:

SALARIES.

| | |
|---|--------------|
| 1 General Superintendent..... | \$ 6,000 00 |
| 1 Assistant General Superintendent..... | 4,500 00 |
| 1 Private Secretary to General Superintendent..... | 2,000 00 |
| 1 Secretary of Department..... | 2,250 00 |
| 4 Inspectors at \$2,800..... | 11,200 00 |
| 3 Clerks, Secretary's office, at \$1,000..... | 3,000 00 |
| 1 Chief Clerk, Detective Department..... | 1,500 00 |
| 1 Day Clerk, " "..... | 1,000 00 |
| 1 Night Clerk, " "..... | 1,000 00 |
| 1 Superintendent Bureau of Identification..... | 1,800 00 |
| 1 Photographer..... | 1,200 00 |
| 1 Assistant Photographer..... | 900 00 |
| 3 Stenographers at \$1,000..... | 3,000 00 |
| 1 Printer..... | 1,200 00 |
| 1 Assistant Printer..... | 720 00 |
| 1 Veterinary Surgeon..... | 1,800 00 |
| 1 Assistant Veterinary Surgeon..... | 1,000 00 |
| 15 Captains at \$2,250..... | 33,750 00 |
| 59 Lieutenants at \$1,500..... | 88,500 00 |
| 2 Lieutenants, Detective Department, at \$1,700..... | 3,400 00 |
| 2 Sergeants, " " at \$1,400..... | 2,800 00 |
| 111 Patrol Sergeants at \$1,200..... | 133,200 00 |
| 107 Desk Sergeants at \$1,200..... | 128,400 00 |
| 60 Detective Sergeants at \$1,200..... | 72,000 00 |
| 23 Haymarket Pensioners at \$500..... | 11,500 00 |
| 2750 First-class Patrolmen at \$1,000..... | 2,750,000 00 |
| 50 Probationary Patrolmen for six months, per month \$60... | 36,000 00 |
| 1 Custodian..... | 1,600 00 |
| 4 Vehicle Inspectors at \$1,200..... | 4,800 00 |

| | |
|--|----------------|
| 1 Chief Operator..... | 1,600 00 |
| 1 Assistant Chief Operator | 1,300 00 |
| 125 Operators at \$720..... | 90,000 00 |
| 94 Patrol Drivers at \$720..... | 67,680 00 |
| 8 Ambulance Drivers, at \$720..... | 5,760 00 |
| 6 Supply Drivers at \$720 | 5,040 00 |
| 8 Engineers at \$1,000..... | 8,000 00 |
| 7 Assistant Engineers for 8 months at \$550..... | 3,850 00 |
| 40 Janitors at \$530..... | 21,200 00 |
| 10 Hostlers at \$630..... | 6,300 00 |
| 1 Chief Matron..... | 900 00 |
| 30 Matrons at \$720..... | 21,600 00 |
| 1 Foreman of Repair Shop | 1,200 00 |
| 4 Painters in Shop at \$900..... | 3,600 00 |
| 2 Wagon Makers at \$900..... | 1,800 00 |
| 7 Carpenters at \$900..... | 6,300 00 |
| 4 Blacksmiths at \$1,000..... | 4,000 00 |
| 4 Blacksmith's Helpers at \$720..... | 2,880 00 |
| 2 Harness Makers at \$900..... | 1,800 00 |
| 1 Plumber..... | 1,000 00 |
| 1 Assistant Plumber..... | 900 00 |
| 1 Foreman Construction Department..... | 1,500 00 |
| 6 Painters and Calciminers at \$900..... | 5,400 00 |
| 13 Laborers at \$630..... | 8,190 00 |
| 1 Feed Inspector..... | 1,000 00 |
| Total for salaries..... | \$3,582,820 00 |

NOTE--In case no appropriation is made for new police stations asked for in this appropriation, we will require only 57 Lieutenants, 107 Patrol Sergeants, 103 Desk Sergeants, 121 Operators, and 90 Patrol Drivers.

The Telephone Operators have petitioned for increase from \$720 to \$900. I submit the same for such action as you deem proper.

FOR MISCELLANEOUS EXPENSES.

For rents, secret service, repairs of stations and barns, gas, fuel, rations for prisoners and lodgers, stars, clubs, belts, buttons, devices for hats and caps, furniture, beds, bedding, towels, photographic supplies, livery, postage, express, telegraph messages, purchase and exchange of horses, harness, medicine for the hospital, medicine for ambulance wagons, barn fixtures, feeding and shoeing horses, printing of annual report, printing and stationery, blank books, material for new wagons and repairing old ones, rents of telephones, special assessments, shavings, lumber, hardware, ice, city directories, etc., etc..... \$150,000 00

NOTE.—It is very essential that this department should have the amount I have asked for appropriated for miscellaneous expenses, as a number of our stations will need considerable repairing this year, and we will need new stock and wagons for our patrol service, and I would respectfully urge you not to reduce the amount asked for. The amount appropriated last year for miscellaneous expenses was \$125,000, and notwithstanding the most rigid economy a deficit of \$15,000 resulted, and many absolutely necessary repairs of the property and equipment of the Department had to be postponed.

NEW SITES AND BUILDINGS.

| | |
|--|----------------|
| For new station to take the place of present one situated at 2523 Cottage Grove avenue, to be built upon the same site, and to cover the entire ground space, 30x136 feet, the present station being inadequate and in such a dilapidated and unsanitary condition, as to render its further use a menace to the health of the men, and insufficient in size to accommodate properly either the men stationed there or the public having to transact business with the department..... | \$20,000 |
| For site and station in neighborhood of 48th street and Ashland avenue, the same being greatly needed to relieve the 17th, 19th and 8th Precincts..... | 12,500 |
| For site and station in neighborhood of West 40th and Harrison streets, needed to relieve the 24th, 25th, 30th and 37th Precincts | 12,500 |
| | <hr/> \$45,000 |

RECAPITULATION.

| | |
|----------------------------------|----------------------|
| For salaries..... | \$3,582,820 00 |
| For miscellaneous expenses..... | 150,000 00 |
| For new sites and buildings..... | 45,000 00 |
| Total..... | <hr/> \$3,777,820 00 |

Respectfully submitted,

J. J. BADENOCH,
General Superintendent.

Section VII.

TWENTY-FIFTH ANNUAL REPORT
OF THE
BOARD OF DIRECTORS
OF THE
CHICAGO PUBLIC LIBRARY

JUNE, 1897.



CHICAGO :
PUBLIC LIBRARY ROOMS, CITY HALL.
1897



BOARD OF DIRECTORS.

1896-97.

| | | |
|--|--------------|-------|
| AZEL F. HATCH, <i>President</i> , | Term expires | 1897. |
| ROB'T S. McCORMICK, <i>Vice-Pres't</i> , | " " | 1899. |
| EMIL G. HIRSCH, | " " | 1897. |
| EDWARD S. DREYER, | " " | 1898. |
| THOMAS F. KEELEY, | " " | 1897. |
| SEVERT T. GUNDERSON, | " " | 1898. |
| JAMES W. HEDENBERG, | " " | 1898. |
| JOHN M. VAN OSDEL, | " " | 1899. |
| JOHN B. HAMILTON, | " " | 1899. |

W. B. WICKERSHAM, *Secretary to the Board*.

STANDING COMMITTEES.

1896-97.

Library: MESSRS. HIRSCH, McCORMICK and HAMILTON.

Administration: MESSRS. McCORMICK, HIRSCH and KEELEY.

Delivery Stations: MESSRS. GUNDERSON, HEDENBERG and
VAN OSDEL.

Buildings and Grounds: MESSRS. DREYER, HIRSCH, HED-
ENBERG, VAN OSDEL and KEELEY.

Finance: MESSRS. VAN OSDEL, McCORMICK and DREYER.

By-Laws: MESSRS. KEELEY, GUNDERSON and HAMILTON.

MEMBERS OF THE BOARD, FROM ITS ORGANIZATION, APRIL 11,
1872, TO JULY 1, 1897, WITH THEIR TERMS OF SERVICE.

PRESIDENTS PRINTED IN CAPITALS.

| | | | |
|-----------------------|-----------|------------------------|-----------|
| ALLEN, JAMES LANE.... | 1880-1882 | McMILLAN, T. C..... | 1882-1887 |
| ANTHONY, ELLIOTT.... | 1872-1877 | MANNHARDT, EMIL..... | 1885-1888 |
| ARMSTRONG, GEO. B.... | 1881-1882 | MASON, GEORGE..... | 1874-1880 |
| BEEBE, WM. H..... | 1887-1889 | *MOOS, BERNHARD..... | 1887-1896 |
| *BILLINGS, ALBERT M.. | 1875-1878 | MOSES, ADOLPH..... | 1882-1888 |
| BRADLEY, J. HARLEY... | 1887-1887 | ONAHAN, WM. J..... | 1874-1881 |
| BRINE, GEO. J..... | 1886-1887 | *QUEAL, ROB'T F..... | 1872-1876 |
| BROSSEAU, Z. P..... | 1893-1896 | *RASTER, HERMANN.... | 1872-1875 |
| *CALLAGHAN, B..... | 1880-1886 | REND, WM. P..... | 1889-1892 |
| *CURRAN, WM..... | 1882-1883 | ROGERS, HENRY W.... | 1883-1885 |
| DIENER, T. C..... | 1893-1895 | ROSENTHAL, JULIUS.... | 1872-1875 |
| DREYER, EDWARDS. | 1889-1895 | RUBENS, HARRY.... | 1879-1885 |
| ENRIGHT, JOHN W.. | 1883-1888 | SCHMIDT, ERNST..... | 1881-1882 |
| *FORRESTER, ROB'T H.. | 1879-1880 | *SCRANTON, ABNER R.. | 1876-1879 |
| GUNDERSON, S. T..... | 1895-1898 | *SHEAHAN, JAMES W.... | 1872-1874 |
| HAMILTON, JOHN B.... | 1896-1899 | SHOREY, DAN'L L.... | 1872-1880 |
| HATCH, AZEL F..... | 1890-1893 | SHORTALL, JOHN G. | 1886-1895 |
| HATCH, AZEL F..... | 1894-1897 | SMITH, PLINY B..... | 1888-1894 |
| *HAYES, SAMUEL S.... | 1872-1875 | SMITH, ROBERT J..... | 1890-1893 |
| HEDENBERG, JAMES W. | 1895-1898 | SMITH, SIDNEY..... | 1877-1879 |
| HIRSCH, EMIL G.... | 1888-1897 | SMYTH, JOHN M..... | 1892-1895 |
| HOTZ, FERDINAND C.... | 1875-1881 | SPRAGUE, OTHO S. A.... | 1878-1881 |
| *HOYNE, THOS..... | 1872-1875 | *SWAZEY, ARTHUR..... | 1885-1887 |
| HYNES, WM. J..... | 1881-1887 | UMBDENSTOCK, MICH'L. | 1887-1890 |
| *KADLEC, L. W..... | 1880-1889 | VAN OSDEL, JOHN M.... | 1896-1899 |
| KASPAR, WM..... | 1889-1894 | WALKER, J. B..... | 1875-1883 |
| KEELEY, THOS. F..... | 1894-1897 | *WELLS, WM. H..... | 1882-1885 |
| KENT, WM. D..... | 1888-1889 | WILLIAMS, NORMAN.... | 1887-1889 |
| LOEWENTHAL, B.... | 1875-1882 | *WOODARD, WILLARD. | 1872-1874 |
| McCORMICK, ROB'T S... | 1895-1899 | | |

*SHEAHAN, Jas. W., Acting Secretary from April 11 to July 20, 1872.

WICKERSHAM, W. B., Secretary since July 20, 1872.

*POOLE, WM. F., LL. D., Librarian from October 25, 1873, to August 1, 1887.

HILD, FREDERICK H., Librarian since October 15, 1887.

*Deceased.

LIBRARY SERVICE.

Librarian: FREDERICK H. HILD.

Secretary: WILLIAM B. WICKERSHAM.

Assistant Librarians:

E. F. L. GAUSS, *First Assistant.*

ELIZABETH A. YOUNG, KATE M. HENNEBERRY.

Library Assistants:

BENJ. M. SMITH, *Supt. Day Service.*

J. RITCHIE PATTERSON,
WILLIAM A. PURER,
REIDAR ARENTZ,
JOHN F. PHELAN,
CARRIE L. ELLIOTT,
MAY BOSTETTER,
LILYAN G. MORAWSKI,
OTTO GOLDBERGER,
OTILIE GOLDBERGER,
MAY I. CARROLL,
CARL B. RODEN,
MARGARET KEARNEY,
FRANK E. WASKA,
HENRY G. WILSON,
CHARLES R. BARNES,
HATTIE HYDE,
HENRIETTA LOVI,
AMELIA M. PLATT,
AMANDA DIEHL,
JESSIE BOOTH,
JOHN E. KOSTKA,
AGNES COLEMAN,
JOSEPH J. MCCARTHY,
EMMA ROMMEISS,
CHARLES A. LARSON,
ANNA FITZGERALD,
MARY M. HISHEN,
JOHN A. BARRON,
ANNA RIORDAN,
EMANUEL HOLY,
FRANK SCHMIDT,
EDWARD HENWOOD,
WALTER L. HICKEY,
THOMAS B. MARTENS,
JACOB A. MEISLISCH,
CHESLEY R. PERRY,

STEPHANIE SKORAZINSKA,
KATHARINE DONOVAN,
MARGARET CRAIN,
KATHARINE LACEY,
CHRISTIAN SONNE,
JOHN TOMAN,
NELLIE E. DORAN,
OSCAR W. ROSENTHAL,
PHILIP BRAHAM,
EDWARD PIEPER,
ALBERT W. TAYLOR,
ANITA C. DAVIES,
EDWARD ROHRER,
GEORGE BELL,
WASHINGTON PRIBYL,
FRANK PETTIT,
ERNEST G. FOURNIER,
PATRICK J. A. LAWLER,
EDWARD H. NUELSON,
GEORGE S. KING,
ARTHUR P. SAMMONS,
MASON TROWBRIDGE,
RICHARD NEUBAUER,
WILLIAM H. BROWN,
ALBERT DE ROODE,
TIMOTHY J. GRIFFIN,
ELIE HUDON,
OLAF OLAFSSON,
BESSIE GOLDBERG,
EMILY E. TAYLOR,
ELISE HARMS,
ABBIE B. FIELD,
AGNES DONOGHUE,
MINNIE E. WILLS,
MARY LEONARD,
MARTHA SCANLAN.

Day Substitute:

MARY W. WOOD.

Evening Attendants:

CHARLES LHOTKA,
AUGUST J. C. TIMM,
LOUIS B. HIGGINBOTTOM,
ABRAHAM ETTELSON,

JULIUS H. P. GAUSS,
JOHN E. MULLEN,
OSWALD J. ARNOLD,
HARRY A. SIMON,

JOHN F. VAUGHAN.

Evening Substitutes:

JOHN E. DVORAK,
EDWARD W. MCGREW,

ALVAH L. HAGER,
J. GEORGE VAUGHAN.

Branch Reading Room Employes:

NO. 1. SAM'L ROGALSKI, *Supt.*
ISAAC SISSMAN, *Asst.*

NO. 4. WILL L. SHIDE, *Supt.*
MARY E. REMMER, *Asst.*

NO. 2. J. C. BARBEE, *Supt.*
J. S. BARBEE, *Asst.*

NO. 5. JOHN A. YOUNG, *Supt.*
RUDOLPH STEINBORN, *Asst.*

NO. 3. CHR. A. LANGE, *Supt.*
HERMAN PERZ, *Asst.*

NO. 6. EDWARD KIRSCH, *Supt.*
MAXWELL NICKERSON, *Asst.*

Janitors:

NEWTON S. PURVIANCE,
EMIL SCHOENBACHER,
HENRY J. SEIDSCHKE,

JAMES C. KING,
HENDRIKA HENRIKSEN,
IDA MORRISSETTE,

JOHN B. LIVERNOIS, *Substitute Janitor.*

Engineers:

JACOB REITZ, *Chief Engineer.*

CHARLES I. MOULTON, *First Assistant Engineer.*

Night Watchman: AARON S. EINSTEIN.

Electrician: EDWARD MARTIN.

Expressman for Delivery Stations: MORRIS ROSENSTOCK.

TWENTY-FIFTH ANNUAL REPORT
OF THE
DIRECTORS OF THE
CHICAGO PUBLIC LIBRARY.

TO THE HONORABLE THE MAYOR AND MEMBERS OF THE
CITY COUNCIL:

Gentlemen:—The Board of Directors of the Chicago Public Library, in presenting their annual report for the year ending May 31, 1897, desire to express their appreciation and thanks for the wise and liberal provision for the Public Library which the municipal authorities of Chicago have made. In this expression we know that we voice the sentiment of the many thousand patrons and friends of the Library.

It is in fact a subject of public congratulation that a beautiful and commodious library building, adequate for the growth of the Library for many years to come, has been erected and paid for by the people.

The crowded departments of the City Government are to be congratulated that the space in the City Hall now occupied by the Library will soon be relinquished by it and can be used for other much needed purposes.

The many friends of the Library will rejoice that after twenty-five years of wandering and sojourning in temporary, inadequate and inconvenient quarters, the Library has at last found a satisfactory home.

The new building is practically finished. Its erection has necessarily been slow by reason of the fact that the funds have been derived from six annual appropriations and could be available only as the taxes have been from year to year collected.

During the year ending May 31, 1897, six hundred thirty-eight thousand four hundred and seventeen dollars and seventy-four cents (\$638,417.74) have been expended on account of the building, leaving a balance of appropriation to the credit of the building account of two hundred ninety-seven thousand one hundred and ninety-eight dollars and seventy-three cents (\$297,198.73).

It is with great satisfaction that we are able to announce that the building will be completed and furnished ready for occupancy well within the appropriation. This has been accomplished by the preparation of very complete and carefully prepared plans and specifications and the firm insistence at all times that the plans and specifications shall be strictly adhered to and carried out by the contractors. The practical success of this method is evidenced by the absence of extras.

The high character of the work required and insisted upon in this building, together with the beauty and monumental character of the structure, has produced a most interesting and spirited competition and emulation among contractors to have their work and goods represented, and has resulted not only in good work, but in substantial economies in the cost of the building. Contractors have been in some instances willing to take and carry out contracts at cost or less, by reason of the endorsement and advertisement to be gained by having their work accepted in a building of such high class.

Our experience has demonstrated that a public building can be erected without extras and within the appropriation and as economically as a private structure.

It has also demonstrated that it is possible to combine economy and careful attention to convenience and utility with art and beauty.

The new building, we believe, will be recognized as an ornament to our city and country.

We wish to acknowledge our appreciation of the services of Messrs. Shepley, Rutan & Coolidge, the architects, and Mr. N. E. Weydert, the superintendent, who have been most efficient and zealous in executing the wishes of the Board and in protecting the interests of the Library and the City.

By reason of the crowded condition of our present quarters, only such books have been purchased during the last year as were considered indispensable.

On May 31, 1897, the Library contained two hundred twenty thousand seven hundred and thirty-six (220,736) volumes. During the year, seven thousand one hundred and seventy-one (7,171) were added, of which five thousand three hundred and forty-nine (5,349) were by purchase, nine hundred and twenty-nine (929) by donation and eight hundred and ninety-three (893) were received from the reading rooms. The thanks of the City are due to the generous donors.

Upon removal to the new Library building, it will be possible and desirable to make many needed additions to the Library which the cramped quarters of the last few years have rendered impossible. For the same reason it has been impossible to increase our delivery station service, for which there is a great demand. The home circulation of the Library through the delivery stations now exceeds the home circulation of the central Library, and is steadily increasing, and is, moreover, susceptible of very extended development. With the increased facilities of the new building, it is believed that the usefulness and convenience of the Library can be very greatly increased and extended.

The total home circulation of books for the year was one million two hundred and fifteen thousand nine hundred and ninety-seven (1,215,997) volumes, of which five hundred and eighty-four thousand four hundred and fifty-five (584,455) were from the main Library and six hundred and thirty-one thousand five hundred and forty-two (631,542) through the delivery stations.

The number of persons holding two-year cards entitling them to draw books for home use is fifty-four thousand two hundred and eight (54,208).

For more detailed information regarding the growth and use of the Library during the past year, we refer to the reports of the Librarian and the Secretary presented herewith. The statistics show that the circulation of the Library has been steadily increasing in all of its departments, and that its usefulness and popularity are fully sustained.

The departments of patents and public documents were on February 15, 1897, removed to the new Library building. The increased circulation in these departments since the removal has been most gratifying.

We have every reason to believe that with the removal of the other departments of the Library we shall witness a more general and extended use of its privileges than anything we have seen. To the women and children of the city, for whom no adequate provision could be made in our old quarters, the change will be most welcome.

In the report of the Secretary, hereto attached, will appear an itemized account of the moneys received and disbursed.

With sincere satisfaction we recognize the able and efficient services rendered during the past year by our Librarian as well as by the employees of the Library.

AZEL F. HATCH, *President*,
ROBERT S. McCORMICK, *Vice-President*,
EMIL G. HIRSCH,
E. S. DREYER,
THOMAS F. KEELEY,
S. T. GUNDERSON,
JAMES W. HEDENBERG,
JOHN M. VAN OSDEL,
JOHN B. HAMILTON,

Board of Directors.

CHICAGO, June 25, 1897.

APPENDIX.

ANNUAL REPORT

OF THE

COMMITTEE ON

BUILDINGS AND GROUNDS.

TO THE PRESIDENT AND BOARD OF DIRECTORS OF THE
CHICAGO PUBLIC LIBRARY :

Gentlemen:—In accordance with your by-laws your Committee on Buildings and Grounds herewith presents its annual report.

The work on the new building has advanced to a stage of progress but slightly remote from actual completion. Since the date of our last annual report forty-six contracts have been awarded, making in all seventy-one to date. The contracts awarded during the year aggregate the sum of \$239,679.49. Particulars concerning all the contracts let up to date, their original amounts, the amounts of payments made on account, etc., are given in the accompanying table.

It appears from this table that the added amount of alterations, whether additions or deductions, is about 2.84 per cent of the total amount of contracts awarded. It is gratifying that the amount of deductions exceeds that of additions by the sum of \$1,315.07 in favor of the Library. The net amount of contracts at this date is \$1,864,595.42.

The actual operations of the year have been mainly the following: Completion of the rear court, coal vaults and fence; installation of track scales; installation of coal and ash handling machinery and automatic coal weighing machine; completion of the boiler plant; completion of coal tracks; completion of heating and main escape pipes; setting of radiators and coils; roughing in of plumbing pipes; installation of plumbing fixtures (as far as feasible and not delayed by the marble work); completion of electric light conduits, wiring and cut-out boxes; completion of switchboard; installation of ten dynamos and five engines and their foundations; completion of pipe trenches; installation of two electric power, three steam and two fire pumps and their foundations; completion of conduits for clocks and telephones; installation of feed water heater; installation of two air pumps for automatically operating elevator doors; installation of ten elevators; completion of elevator cabs in mahogany and bronze; practical completion of air ducts in cellar; erection of fourteen fans; completion of foundations for fans and heating stacks; erection of heating stacks; laying of granitoid floors in cellar; practical completion of encaustic tile and marble tile floors; practical completion of marble mosaic floors; practical completion of pine, maple and oak floors; laying of cork carpets in three rooms; completion of wire and metal lathing, etc.; completion of plaster and stucco work; practical completion of painters' and decorators' work; completion of stained glass domes; completion of glass mosaic friezes and pendentives in the delivery room, and of by far the larger portion of glass mosaic and marble inlays; putting up of marble wainscoting, English pollard oak and mahogany wainscoting, door and

TABLE OF CONTRACTS LET ON BUILDING FOR CHICAGO PUBLIC LIBRARY, TO JUNE 1, 1897

| CONTRACTOR | Number of Contract | CONTRACT | Date of Award | Original Amount | Total Additions | Total Deductions | Amount of Payments | Balance on Contracts | Date of Settlement | Amount of Settlement | Net Additions | Net Deductions |
|-------------------------------------|--------------------|---|----------------|-----------------|-----------------|------------------|--------------------|----------------------|--------------------|----------------------|---------------|----------------|
| Moss & Arnold | 1 | Foundation | July 23, 1892 | \$ 159,000 00 | | | \$ 163,799 50 | | Dec. 5, 1895 | \$ 163,799 50 | \$ 4,790 50 | |
| David Reed | 2 | Superstructure | Sept. 12, 1892 | 617,662 00 | 7,788 75 | 2,989 25 | 663,688 50 | | June 14, 1895 | 663,688 50 | | \$ 13,903 43 |
| Carl Hader | 3 | Painting Iron | June 9, 1894 | 2,550 00 | | | 2,550 00 | | Feb. 23, 1895 | 2,550 00 | | |
| Purdy & Hutcheson | 4 | Plaster Cases | June 29, 1894 | 1,100 00 | | | 1,100 00 | | Oct. 13, 1894 | 1,100 00 | | |
| Geo. F. Kimball & Co. | 5 | Glazing | July 25, 1894 | 25,000 00 | | 47 92 | 21,952 08 | | June 28, 1895 | 21,952 08 | | 47 92 |
| Vierling, McDowell & Co. | 6 | Iron Window Frames and Sashes | Aug. 11, 1894 | 20,880 00 | 277 00 | | 20,808 50 | \$ 257 50 | Nov. 9, 1895 | | 277 00 | |
| Jacob Furst Sons | 7 | Carving | Oct. 13, 1894 | 42,045 00 | | | 42,045 00 | | May 25, 1895 | 42,045 00 | | |
| Benezette Williams | 8 | Drainage | Nov. 19, 1894 | 33,800 00 | | | 33,800 00 | | Apr. 6, 1895 | 33,800 00 | | |
| Carl Bader | 9 | Stairs, etc. | Feb. 9, 1895 | 5,800 00 | 1,850 00 | | 7,540 00 | | Oct. 12, 1895 | 7,540 00 | 1,650 00 | |
| Shore Co. | 10 | Elevators | Feb. 23, 1895 | 3,398 00 | | | 3,398 00 | | Nov. 11, 1896 | | | |
| Joseph Stamsen & Co. | 11 | Sidewalks, etc. | May 31, 1895 | 26,245 00 | | | 26,245 00 | | Oct. 12, 1895 | | | |
| Otto Hage | 12 | Excavating Cellar Floors | June 11, 1895 | 594 00 | | | 594 00 | | June 28, 1895 | | | |
| John Mohr & Sons | 13 | Boiler Plant | June 20, 1895 | 19,000 00 | | | 17,000 00 | 2,000 00 | | | | |
| Albert H. Wolfe | 14 | Boiler Room Floors, etc. | Oct. 2, 1895 | 3,840 00 | | | 3,840 00 | | | | | |
| Tiffany Glass & Decorating Co. | 15 | Interior Finish of Reading and Reference Rooms | Oct. 2, 1895 | 40,700 00 | 500 00 | | 33,668 00 | 7,532 00 | Mar. 14, 1896 | 3,840 00 | | 500 00 |
| Evans Marble Co. | 16 | Interior Finish of the Minor Rooms | Oct. 2, 1895 | 83,900 00 | 836 00 | | 68,063 00 | 16,033 00 | | | | 836 00 |
| Evans Marble Co. | 17 | Interior Finish of Randolph St. Entrance Hall, etc. | Oct. 2, 1895 | 75,802 00 | | | 60,749 50 | 15,052 50 | | | | |
| Evans Marble Co. | 18 | Interior Finish of Washington St. Staircase, etc. | Oct. 2, 1895 | 282,147 00 | 1,395 00 | | 213,604 00 | 69,848 00 | | | 1,395 00 | |
| Illinois Terra Cotta Lumber Co. | 19 | Interior Partitions, etc. | Nov. 9, 1895 | 15,768 00 | 105 00 | | 15,963 00 | | Feb. 8, 1896 | 15,963 00 | 105 00 | |
| E. Haggert | 20 | Plumbing | Dec. 5, 1895 | 21,550 00 | 2,161 00 | 1,870 00 | 20,065 00 | 4,176 00 | | | 201 00 | |
| The P. M. Quay Co. | 21 | Direct Steam Heating | Dec. 17, 1895 | 30,150 00 | 65 00 | | 28,162 00 | 2,653 00 | | | 65 00 | |
| Thos. Conant Plumbing & Heating Co. | 22 | Gas Piping | Mar. 14, 1896 | 1,505 00 | | | 1,505 00 | | May 23, 1896 | 1,505 00 | | |
| L. H. Prentice Co. | 23 | Ventilating Ducts and Register Openings | Mar. 14, 1896 | 17,480 00 | | | 17,480 00 | | June 12, 1896 | 17,480 00 | | |
| Burdett-Rowntree Mfg. Co. | 24 | Electric Light Wiring | Mar. 14, 1896 | 18,171 00 | 1,106 80 | 1,286 75 | 14,739 00 | 3,352 00 | | | | 1,106 80 |
| Evans Marble Co. | 25 | Interior Finish of G. A. R. Memorial Hall, etc. | May 23, 1896 | 71,085 00 | 125 00 | | 59,650 00 | 15,110 00 | | | | |
| Alexander H. Jewell & Co. | 26 | Wooden Book-shelves | July 10, 1896 | 7,653 00 | | | 500 00 | | Nov. 28, 1896 | 653 00 | 125 00 | |
| Chicago Ornamental Iron Co. | 27 | Cast Iron Fascia Plates | July 10, 1896 | 632 50 | | | 632 50 | | Nov. 14, 1896 | 632 50 | | |
| Crane Elevator Co. | 28 | Electric Elevators | July 10, 1896 | 18,920 00 | | | 15,725 00 | 3,065 00 | | | | |
| Thomas Allen | 29 | Sheet Copper Work | July 24, 1896 | 2,660 00 | | | 2,660 00 | | Sept. 25, 1896 | 2,660 00 | | |
| Burdett-Rowntree Mfg. Co. | 30 | Elevator Door Opening Mechanisms | July 24, 1896 | 3,062 50 | | | 2,305 00 | 759 00 | | | | |
| Penton Metallic Mfg. Co. | 31 | Metal Book Stacks | Sept. 3, 1896 | 28,318 00 | 168 00 | | 10,300 00 | 19,316 00 | | | 168 00 | |
| Elevator Supply & Repair Co. | 32 | Automatic Annunciators and Indicators | July 28, 1896 | 500 00 | | | 500 00 | | | | | |
| Fairbanks, Morse & Co. | 33 | Ten Ton Scale | Sept. 3, 1896 | 119 25 | | | 119 25 | | Jan. 30, 1897 | 119 25 | | |
| Jonathan Clark & Sons Co. | 34 | Coal Vaults, etc., Sections A and B | Sept. 3, 1896 | 8,294 00 | | | 8,294 00 | | Jan. 9, 1897 | 8,294 00 | | |
| Stamsen & Blome | 35 | Coal Vaults, etc., Section C | Sept. 3, 1896 | 2,526 00 | | | 2,526 00 | | Dec. 26, 1896 | 2,526 00 | | |
| Praet & Whitney Co. | 36 | Automatic Coal Weighing Machine, etc. | Sept. 11, 1896 | 350 00 | | | 300 00 | 50 00 | | | | |
| Borden & Selbeck Co. | 37 | Ash Handling Machinery | Sept. 19, 1896 | 2,050 00 | 54 00 | | 2,104 00 | | May 8, 1897 | 2,104 00 | 54 00 | |
| Excelsior Heater Co. | 38 | Feed Water Heater | Sept. 19, 1896 | 520 00 | | | 420 00 | 100 00 | | | | |
| Ball Engine Co. | 39 | Engines and Dynamos | Sept. 19, 1896 | 32,333 00 | | | 25,000 00 | 7,333 00 | | | | |
| Henion & Hubbell | 40 | 3 Duplex Feed Pumps | Oct. 1, 1896 | 574 00 | | | 474 00 | 100 00 | | | | |
| Borden & Selbeck Co. | 41 | Coal Handling Machinery | Oct. 1, 1896 | 3,086 00 | | | 3,086 00 | | May 8, 1897 | 3,086 00 | | |
| Clarence I. Wolfinger | 42 | Elevator Cars | Oct. 10, 1896 | 4,920 00 | | | 4,080 00 | 840 00 | | | | |
| Wellish-Bierce & Smith-Valle Co. | 43 | Electric House Pump and Electric Boiler Pump | Oct. 12, 1896 | 1,275 00 | | | 880 00 | 395 00 | | | | |
| Marshall Field & Co. | 44 | Cork Carpet | Oct. 30, 1896 | 1,756 18 | 1,865 73 | | 3,651 91 | | | | 1,865 73 | |
| Edmunds Mfg. Co. | 45 | Counters, Railings and Bookcases | Nov. 14, 1896 | 3,540 00 | | | 1,700 00 | 1,840 00 | | | | |
| T. W. Wilmarth Co. | 46 | Lamp Globes, with Electric Lamps | Nov. 14, 1896 | 53 50 | | | 53 50 | | | | | |
| Chicago Edison Co. | 47 | Switchboard | Nov. 14, 1896 | 7,380 00 | | | 4,462 50 | 2,917 50 | | | | |
| Chicago Ornamental Iron Co. | 48 | Bronze Work | Nov. 20, 1896 | 3,189 50 | 535 00 | | 3,189 50 | | | | 535 00 | |
| he J. G. Wagner Co. | 49 | Wrought Iron Fence | Dec. 2, 1896 | 2,030 00 | | | 2,030 00 | | Apr. 24, 1897 | 2,030 00 | | |
| Fairbanks, Morse & Co. | 50 | 2 Fire Pumps | Dec. 25, 1896 | 1,340 00 | | | 1,000 00 | 390 00 | | | | |
| The E. Howard Watch & Clock Co. | 51 | Electric Clocks | Jan. 4, 1897 | 1,750 00 | | | | 1,750 00 | | | | |
| Stamsen & Blome | 52 | Engine and Pump Foundations | Jan. 4, 1897 | 4,224 00 | | | 4,224 00 | | Jan. 23, 1897 | 4,224 00 | | |
| Oxley & Enos Mfg. Co. | 53 | Electric and Gas Fixtures | Jan. 9, 1897 | * 23,499 60 | | | 2,471 29 | 21,028 31 | | | | |
| Thomas & Smith | 54 | Indirect Heating | Jan. 9, 1897 | 8,849 00 | | | 7,140 00 | 1,709 00 | | | | |
| the A. H. Andrews Co. | 55 | Miscellaneous Furniture, Division A | Jan. 30, 1897 | 5,028 00 | 120 00 | | | | | | 120 00 | |
| Wm. H. Wagner Mfg. Co. | 56 | Miscellaneous Furniture, Division C | Jan. 30, 1897 | 6,924 00 | | | 4,250 00 | 2,674 00 | | | | |
| Office Specialty Mfg. Co. | 57 | Miscellaneous Furniture, Division D | Jan. 30, 1897 | 1,261 65 | | | 1,261 65 | | | | | |
| Oxley & Enos Mfg. Co. | 58 | Electric Fixtures (Division E of Furniture) | Jan. 30, 1897 | 1,195 50 | | | 1,195 50 | | | | | |
| T. W. Wilmarth Co. | 59 | Electric Fixtures (Division F of Furniture) | Jan. 30, 1897 | 1,152 50 | 90 00 | | 1,242 50 | | | | 90 00 | |
| Baummann-Simon Co. | 60 | Miscellaneous Furniture, Division B | Feb. 13, 1897 | 2,656 25 | | | 2,656 25 | | | | | |
| Schlesinger & Mayer | 61 | Shades and Wooden Screens | Feb. 27, 1897 | 2,569 50 | | | 2,569 50 | | | | | |
| Chicago Telephone Co. | 62 | 21 Private Exchange Telephones and Switchboard | Mar. 13, 1897 | 420 00 | | | 420 00 | | | | | |
| Chicago Telephone Co. | 63 | 3 Telephones and a Trunk Line Wire | Mar. 13, 1897 | 350 00 | | | | 350 00 | | | | |
| George M. Gross | 64 | Ventilation, Division A | Mar. 27, 1897 | 14,145 00 | | | 9,265 00 | 4,880 00 | | | | |
| Thomas & Smith | 65 | Ventilation, Division C | Mar. 27, 1897 | 2,628 00 | | | | 2,628 00 | | | | |
| Bostedo Package & Cash Carrier Co. | 66 | Pneumatic and Speaking Tubes | Mar. 27, 1897 | 1,150 00 | | | | 1,150 00 | | | | |
| Boston Blower Co. | 67 | Ventilation, Division E | Mar. 27, 1897 | 19,901 00 | | | 6,800 00 | 13,101 00 | | | | |
| The J. G. Wagner Co. | 68 | Steel and Iron Work in Cellar | Apr. 10, 1897 | 987 00 | | | | 987 00 | | | | |
| Merle & Heaney Mfg. Co. | 69 | Chairs | May 3, 1897 | 1,594 00 | | | | 1,594 00 | | | | |
| Stamsen & Blome | 70 | Granitoid Concrete Work in Cellar, Division A | May 3, 1897 | 5,449 00 | | | | 5,449 00 | | | | |
| Stamsen & Blome | 71 | Granitoid Concrete Work in Cellar, Division B | May 22, 1897 | 2,794 00 | | | | 2,794 00 | | | | |
| Totals | | | | \$ 1,865,910 49 | \$ 25,872 60 | \$ 27,187 67 | \$ 1,609,733 19 | \$ 251,862 23 | | \$ 971,547 90 | \$ 12,876 23 | \$ 14,191 30 |

* An addition will be made to this amount as provided for by Order No. 1, January 23, 1897 (Official Record, page 174).

window architraves and archivolts; hanging of doors, putting up of bronze and ornamental iron grilles, screens, registers, door frames, doors, balusters, etc.; hanging of electric light fixtures; putting up of wooden bookshelves and counters in reading, reference, patent, bound newspaper and art rooms, etc.; completion of metal shelves for patent reports and bound newspapers; delivering and setting in place of some furniture; partial installation of pneumatic tubes and speaking tubes; installation of window opening and closing devices, and other work.

At the present date all the work is well advanced. The high pressure steam piping is the only contract of importance which remains to be let. The portion of the building set apart for the department of patent records and public documents was opened to the patrons of the Library February 15, 1897.

The financial condition of the building fund is shown by the following statement:

Dr.

To balance as per ledger, May 1, 1896.....\$961,725 07

Cr.

By expense during past year on

account of contracts, etc.....\$614,875 43

Loss and cost of collection, ap-

propriation 1895..... 13,211 68 628,087 11

Balance May 1, 1897..... \$ 333,637 96

Total amount due on contracts,

May 1, 1897..... 266,063 50

Balance unappropriated..... \$ 67,574 46

All of which is respectfully submitted,

EDWARD S. DREYER,

EMIL G. HIRSCH,

JAMES W. HEDENBERG,

JOHN M. VAN OSDEL,

THOMAS F. KEELEY,

Committee on Buildings and Grounds.

CHICAGO, June 1, 1897.

ANNUAL REPORT OF THE SECRETARY.

PUBLIC LIBRARY,
CHICAGO, June 25, 1897.

TO THE PRESIDENT AND BOARD OF DIRECTORS,
CHICAGO PUBLIC LIBRARY:

Gentlemen: As required by the seventh section of the Act of the General Assembly, under which the Library is established and maintained, I beg to submit the following financial and statistical statements for the year ended May 31, 1897:

THE LIBRARY FUND.

Maintenance Account.

Dr.

| | |
|-----------------------------------|---------------|
| To Balance June 1, 1896, | |
| Fund of 1879 and prior years (un- | |
| available)..... | \$ 23,534 44 |
| Fund of 1896..... | \$ 113,883 43 |
| Appropriation by City Council, | |
| March, 1897..... | 244,357 00 |
| Miscellaneous receipts, from June | |
| 1, 1896, to May 31, 1897..... | 6,328 73 |
| | <hr/> |
| | \$364,569 16 |

Cr.

| | | | |
|---|--------|-----|--------------|
| By Freight and expressage.....\$ | 118 | 46 | |
| Postage..... | 368 | 00 | |
| Books lost and paid for—found and money refunded..... | 71 | 47 | |
| Salaries..... | 81,448 | 11 | |
| Delivery Stations..... | 14,364 | 16 | |
| Finding lists..... | 366 | 80 | |
| Books..... | 6,600 | 28 | |
| Binding..... | 7,786 | 73 | |
| Newspapers and periodicals..... | 3,798 | 23 | |
| Printing and stationery..... | 2,471 | 49 | |
| Heat and light..... | 6,032 | 17 | |
| Incidental expenses..... | 3,042 | 41 | |
| Furniture and fixtures..... | 414 | 37 | |
| Branch Reading Room rent..... | 5,169 | 96 | |
| Insurance..... | 124 | 55 | |
| <hr/> | | | |
| Total for maintenance of Library..\$ | 132 | 177 | 19 |
| By Loss and cost of collection, appropriation 1895..... | 4,403 | 90 | 136,581 09 |
| <hr/> | | | |
| Balance for maintenance of Library, June 1, 1897..... | | | \$227,988 07 |

Building Account.

Dr.

| | | |
|-------------------------------------|-----------|----|
| To Balance on hand, June 1, 1896... | \$948,828 | 15 |
|-------------------------------------|-----------|----|

Cr.

| | | |
|---|--------|----|
| By Architects' commissions.....\$ | 16,617 | 69 |
| Interior finish, G. A. R. rooms... | 59,670 | 00 |
| Interior finish, minor rooms..... | 65,025 | 00 |
| Interior finish, Randolph St. entrance..... | 59,236 | 50 |

| | |
|--|------------|
| Interior finish, Washington St. entrance..... | 210,379 00 |
| Interior finish, reading and ref- erence rooms..... | 25,678 00 |
| Salaries..... | 7,100 53 |
| Miscellaneous expenses..... | 12,726 28 |
| Consulting engineer..... | 500 00 |
| Window frames and sashes..... | 552 50 |
| Drainage ejector..... | 678 00 |
| Boiler plant..... | 17,000 00 |
| Sheet copper work..... | 2,090 00 |
| Interior partitions..... | 153 00 |
| Plumbing..... | 7,745 00 |
| Steam heating plant..... | 8,935 00 |
| Electric wiring..... | 7,191 00 |
| Fuel..... | 6,077 20 |
| Elevators..... | 15,725 00 |
| Fascia plates..... | 632 50 |
| Wooden bookshelves..... | 653 00 |
| Door opening mechanisms..... | 2,303 50 |
| Book stacks.... | 10,200 00 |
| Scales..... | 119 25 |
| Coal weighing machine..... | 300 00 |
| Boiler room floors..... | 46 00 |
| Coal vaults, piling, etc..... | 8,294 00 |
| Coal vaults, paving, etc..... | 2,526 00 |
| Electric triplex pumps..... | 680 00 |
| Duplex feed pumps..... | 474 00 |
| Feed water heater..... | 420 00 |
| Engine and pump foundations.. | 4,224 00 |
| Coal handling machinery..... | 2,900 00 |
| Ash handling machinery..... | 2,000 00 |
| Engines and dynamos..... | 27,333 00 |
| Switchboard..... | 5,227 50 |
| Indirect heating..... | 7,140 00 |
| Elevator cars..... | 4,080 00 |

| | | |
|------------------------------------|--------------|--------------|
| Counters, railings and bookcases. | 1,700 00 | |
| Bronze work..... | 2,660 00 | |
| Ventilation, Division A..... | 10,965 00 | |
| Ventilation, Division B..... | 10,200 00 | |
| Wrought iron fence..... | 2,039 00 | |
| Annunciators and indicators..... | 500 00 | |
| Fire pumps..... | 1,000 00 | |
| Electric and gas fixtures..... | 2,471 29 | |
| Furniture, Division C..... | 4,250 00 | |
| <hr/> | | |
| Total expenditures for year..... | \$638,417 74 | |
| By Loss and cost of collection, | | |
| appropriation 1895..... | 13,211 68 | 651,629 42 |
| <hr/> | | |
| Balance for building account, June | | |
| 1, 1897..... | | \$297,198 73 |

**STATEMENT OF AMOUNTS DUE ON CONTRACTS AND
BALANCE IN BUILDING FUND UNAPPROPRIATED.**

Due on Contracts:

| | |
|---|-------------|
| Stamsen & Blome, granitoid concrete in rooms | |
| 4, 7, 12, 13, 15, cellar..... | \$ 2,794 00 |
| Stamsen & Blome, granitoid concrete in cellar.... | 5,449 00 |
| Merle & Heaney Mfg. Co., chairs..... | 1,594 00 |
| The J. G. Wagner Co., iron and steel work in | |
| cellar..... | 987 00 |
| Bostedo Package & Cash Carrier Co., pneumatic | |
| and speaking tubes..... | 1,150 00 |
| Geo. M. Gross, ventilation, Division A..... | 3,180 00 |
| Boston Blower Co., ventilation, Division B..... | 9,761 00 |
| Thomas & Smith, ventilation, Division C..... | 2,628 00 |
| Schlesinger & Mayer, shades..... | 2,599 56 |
| The A. H. Andrews Co., furniture, Division A... | 5,158 00 |
| Baumann-Simon Co., furniture, Division B..... | 2,656 25 |

| | |
|--|-----------|
| Wm. H. Warren Mfg. Co., furniture, Division C. | 2,674 00 |
| Office Specialty Mfg. Co., furniture, Division D.. | 1,261 65 |
| Oxley & Enos Mfg. Co., furniture, Division E... | 1,195 50 |
| T. W. Wilmarth Co., furniture, Division F..... | 1,242 50 |
| Thomas & Smith, indirect heating..... | 1,709 00 |
| Oxley & Enos Mfg. Co., electric and gas fixtures.. | 21,028 31 |
| The E. Howard Watch & Clock Co., clocks..... | 1,750 00 |
| Fairbanks, Morse & Co., fire pumps..... | 390 00 |
| Chicago Edison Co., switchboard..... | 2,152 50 |
| Edmunds Mfg. Co., counters, railings and book- cases..... | 1,840 00 |
| Chicago Ornamental Iron Co., bronze work..... | 1,064 50 |
| Marshall Field & Co., cork carpets..... | 3,651 91 |
| T. W. Wilmarth Co., lamp globes with electric lamps..... | 53 50 |
| Clarence I. Wolfinger, elevator cars..... | 840 00 |
| Stilwell-Bierce & Smith-Vaile Co., triplex pumps. | 595 00 |
| Henion & Hubbell, duplex feed pumps..... | 100 00 |
| Borden & Selleck Co., coal handling machinery.. | 186 00 |
| Borden & Selleck Co., ash handling machinery... | 104 00 |
| Excelsior Heater Co., feed water heater..... | 100 00 |
| Ball Engine Co., engines and dynamos..... | 5,000 00 |
| Pratt & Whitney Co., automatic weighing machine..... | 50 00 |
| Burdett-Rowntree Mfg. Co., door opening mechanisms..... | 759 00 |
| Elevator Supply & Repair Co., annunciators and indicators..... | 520 00 |
| Fenton Metallic Mfg. Co., book stacks..... | 19,316 00 |
| Crane Elevator Co., elevators..... | 3,095 00 |
| Frederick Sargent, consulting engineer..... | 500 00 |
| Vierling, McDowell & Co., window frames and sashes..... | 297 50 |
| John Mohr & Sons, boiler plant..... | 2,000 00 |
| Evans Marble Co., interior finish, Washington St. entrance..... | 69,848 00 |

| | |
|--|--------------|
| Evans Marble Co., interior finish, Randolph St. entrance | 15,052 50 |
| Evans Marble Co., interior finish, minor rooms | 16,073 00 |
| The D. M. Quay Co., steam heating plant..... | 2,053 00 |
| Burdett-Rowntree Mfg. Co., electric wiring..... | 3,252 05 |
| Evans Marble Co., interior finish, G. A. R. rooms..... | 15,140 00 |
| E. Baggot, plumbing..... | 4,176 00 |
| Tiffany Glass & Decorating Co., interior finish, reading and reference rooms..... | 6,342 00 |
| <hr/> | |
| Total amount due on contracts now let..... | \$243,369 23 |
| Balance to credit of building account, June 1, 1897..... | \$297,198 73 |
| Total amount due on contracts..... | 243,369 23 |
| <hr/> | |
| Balance unappropriated..... | \$ 53,829 50 |

SUMMARY OF TOTAL RESOURCES.

| | |
|---|--------------|
| Fund of 1879 and prior years (unavailable) | \$ 23,534 44 |
| Maintenance account..... | 227,988 07 |
| Building account..... | 297,198 73 |
| <hr/> | |
| Total resources of Library, June 1, 1897..... | \$548,721 24 |

TRUST FUNDS.

Dr.

| | |
|-------------------------------|--------------|
| Wm. H. Ryder fund..... | \$ 10,000 00 |
| Interest on same to date..... | 4,847 55 |
| Jerome Beecher fund..... | 2,000 00 |
| Interest on same to date..... | 456 76 |
| <hr/> | |
| | \$17,304 31 |

Cr.

| | | | | |
|--|----|--------|----|-------------|
| By Subscription to A. L. A. endowment fund, Jan. 12, 1892..... | \$ | 400 | 00 | |
| F. Louis Frenke, Feb. 27, 1894, loan..... | | 4,000 | 00 | |
| Catharine McBean, June 30, 1894, loan..... | | 10,000 | 00 | |
| Books, Oct. 28, 1895, ordered by Board..... | | 508 | 46 | |
| Books, Jan. 28, 1896, ordered by Board..... | | 247 | 15 | |
| Books, March 3, 1896, ordered by Board..... | | 150 | 00 | |
| Binding, March 10, 1896, ordered by Board..... | | 114 | 00 | |
| Books, Aug. 28, 1896, ordered by Board..... | | 54 | 50 | 15,474 11 |
| Balance in bank, June 1, 1897. | | | | \$ 1,830 20 |

CASH FUNDS.*Dr.*

| | | | | |
|--|----|-------|----|--|
| To Balance cash on hand, June 1, 1896..... | \$ | 2,193 | 82 | |
| City Controller for incidental expenses..... | | 3,285 | 03 | |
| Security deposits..... | | 859 | 75 | |
| Interest on Wm. H. Ryder fund | | 636 | 54 | |
| Interest on Jerome Beecher fund | | 130 | 17 | |

Cr.

| | | | | |
|---|----|-------|----|------------|
| By Incidental expenses as per vouchers audited..... | | | | \$3,191 94 |
| Security deposits refunded..... | | | | 946 75 |
| Books bought from Ryder interest fund..... | | | | 54 50 |
| Balance cash on hand, June 1, 1897..... | | | | 2,912 12 |
| | \$ | 7,105 | 31 | \$7,105 31 |

SUMMARY OF BALANCE.

| | | | |
|--|-------------|-----------|-------------|
| Deposit Typographical Union..... | \$ | 100 00 | |
| Incidental fund..... | | 339 67 | |
| Security deposits..... | | 642 25 | |
| Wm. H. Ryder fund..... | \$ | 10,000 00 | |
| Jerome Beecher fund..... | | 2,000 00 | |
| Wm. H. Ryder interest fund..... | | 3,373 44 | |
| Jerome Beecher interest fund..... | | 456 76 | |
| | | | |
| | \$15,830 20 | | |
| Less am't invested in securities... | 14,000 00 | 1,830 20 | |
| | | | |
| | | | \$2,912 12 |
| Moneys received from the following sources and paid monthly to City Controller, from June 1, 1896, to May 31, 1897: | | | |
| Sale of finding lists..... | \$ | 441 71 | |
| Books lost and paid for..... | | 446 44 | |
| Fines for retention of books.... | | 5,291 29 | |
| Miscellaneous sources..... | | 49 29 | \$ 6,328 73 |
| | | | |
| Paid to City Controller..... | | | \$ 6,328 73 |

BOOKS.

| | |
|---|---------|
| Number of books in Library, June 1, 1896... | 217,203 |
| “ “ purchased the past year... | 5,349 |
| “ “ donated the past year..... | 929 |
| “ “ received from Reading Rooms | 893 |

Total number of books added the past year. 7,171

| | |
|--|---------|
| Number of books worn out the past year | 3,167 |
| Number of books lost and paid for..... | 332 |
| “ “ “ delinquent in 1895-96 | 36 |
| “ “ “ missing in 1895..... | 103 |
| <hr/> | |
| Total number of books subtracted the past year..... | 3,638 |
| <hr/> | |
| Total net additions the past year..... | 3,533 |
| <hr/> | |
| Total number of volumes in Library, June 1, 1897 | 220,736 |
| Number of books unaccounted for in annual inventory of 1897..... | 241 |

Respectfully submitted,

W. B. WICKERSHAM,
Secretary.

STATE OF ILLINOIS, }
COUNTY OF COOK, } ss.

I, W. B. Wickersham, Secretary of the Board of Directors of the Chicago Public Library, do solemnly affirm that the foregoing statements are true to the best of my knowledge and belief.

W. B. WICKERSHAM,
Secretary.

Affirmed to and subscribed before me this 24th day of June, A. D. 1897.

E. F. L. GAUSS,
Notary Public.

Audited and approved :

JOHN M. VAN OSDEL,
ROBERT S. McCORMICK,
E. S. DREYER,
Committee on Finance.

CHICAGO, June 25, 1897.

We have examined the books and accounts of the Chicago Public Library for the year ending May 31, 1897, and find them to be correct. We certify that the foregoing statements of cash funds, Library fund, building account, statement of amounts due on contracts, etc., and statement of trust funds are in accordance therewith.

STUART & YOUNG,
Public Accountants.

REPORT OF THE LIBRARIAN.

TO THE DIRECTORS OF THE CHICAGO PUBLIC LIBRARY :

Gentlemen: I have the honor to submit herewith the twenty-fifth annual report of the Librarian, embodying the statistics of the operations of the Library for the year ending May 31, 1897.

With the close of the twenty-fifth year of its existence the Library enters upon a new epoch which will be marked by removal to its permanent home. So rapid has been the development of the institution during its first quarter century, that during this time it has outgrown three temporary quarters. The third and final removal of the collection of books was begun some months ago, and the reading public already has access to some of the special departments installed in the minor rooms of the new building. The final transfer of the entire collection will be made easier by gradually removing during the coming summer a large number of books which are not much in demand. Unless unforeseen delays occur in the completion of the new building, the Library will be open to the public in its new home before the close of the year. The crowded condition of the rooms in the City Hall, and the lack of shelf room, are the causes of the limited growth of the book collection during the past year. A circulation of 2,661,490 books and periodicals, being an increase of 129,246 over the previous report, however, represents the largest use of the Library during any year of its history. The distribution of this vast number of books and periodicals by departments, was as follows :

BOOKS.

| | | |
|--|---------|-----------|
| Home circulation (Main Library)..... | 584,455 | |
| Home circulation (Delivery Stations).... | 631,542 | |
| Reference Department..... | 375,729 | |
| Patent Department..... | 41,793 | |
| Branch Reading Rooms..... | 130,998 | |
| Bound Newspapers..... | 6,887 | |
| Total circulation of books..... | | 1,771,404 |

PERIODICALS.

| | | |
|----------------------------------|---------|-----------|
| Reading Room (Main Library)..... | 615,387 | |
| Branch Reading Rooms..... | 274,699 | |
| Total issues of periodicals..... | | 890,086 |
| Grand total..... | | 2,661,490 |

The statistics for the various departments are given below, in the order of previous reports. In Appendix A will be found, in condensed form, the statistics of the operations of the Library since 1874.

BOOKS.

The entire number of volumes in the Library on May 31, 1897, was 220,736, showing a net increase of 3,533 volumes over the number reported at the close of last year. The total number of volumes entered in the accession catalogue was 8,171, of which 5,349 were bought, 929 were donated and 893 were received from the various reading rooms. The collection of unbound pamphlets was increased by 1,113, making the entire number now in the Library about 42,700.

There were deducted during the year from the total number of volumes on hand the following items: Books worn out and condemned, 3,167; books lost and paid for, 332; books unaccounted for in the annual inventory of 1895, 103; books not recovered from delinquent book borrowers in 1895-6, 36. An analysis of the books worn out and withdrawn from circulation

shows that 1,535 were English prose fiction, 1,224 juvenile works, 276 books in foreign languages, and 132 in all other classes; 2,224 volumes were purchased to replace worn-out books.

In the following table is shown the classification of the entire accessions of the year and the net increase and extent of each class in the Library :

| | Total Accessions of the Year. | Net Accessions of the Year. | Total No of Volumes in Library. |
|------------------------------------|-------------------------------------|-----------------------------------|---------------------------------------|
| History | 254 | 211 | 13,805 |
| Biography..... | 162 | 152 | 10,113 |
| Travels..... | 110 | 99 | 8,314 |
| Poetry and Drama..... | 57 | 45 | 5,191 |
| Essays and Miscellaneous..... | 46 | 31 | 3,493 |
| Polygraphy and Collected Works | 7 | 3 | 3,023 |
| Fine Arts..... | 75 | 67 | 3,584 |
| Natural Sciences..... | 101 | 88 | 5,205 |
| Practical Arts (including Patents) | 285 | 235 | 12,081 |
| Political and Social Science..... | 210 | 200 | 5,428 |
| Language and Literature..... | 72 | 60 | 3,750 |
| Mental and Moral Science..... | 77 | 72 | 2,978 |
| Ancient Classics..... | 15 | 14 | 1,263 |
| Religion | 51 | 47 | 5,324 |
| Medicine..... | 29 | 22 | 581 |
| Law | 11 | 7 | 784 |
| Periodicals and Newspapers ... | 1,042 | 1,024 | 27,330 |
| Gov't Doc'ts and State Papers... | 451 | 451 | 14,126 |
| Bibliography..... | 94 | 93 | 2,116 |
| Dictionaries and Encyclopædias. | 45 | 41 | 3,124 |
| English Prose Fiction..... | 1,958 | 202 | 36,521 |
| Juvenile Literature..... | 1,723 | 403 | 8,840 |
| German Literature..... | 116 | less 78 | 20,489 |
| French Literature..... | 127 | 113 | 9,680 |
| Italian Literature..... | 5 | 4 | 920 |
| Spanish Literature..... | 3 | 3 | 520 |
| Portuguese Literature..... | .... | .... | 26 |
| Dutch Literature..... | 2 | .... | 1,426 |
| Bohemian Literature..... | 4 | less 71 | 3,815 |
| Polish Literature..... | 4 | 1 | 1,039 |
| Russian Literature..... | 16 | 13 | 463 |
| Scandinavian Literature..... | 15 | less 23 | 4,655 |
| Japanese and Chinese Literature. | .... | .... | 125 |
| Hungarian Literature..... | .... | .... | 1 |
| Welsh Literature..... | .... | .... | 4 |
| Books for the Blind..... | 4 | 4 | 590 |
| Total | 7,171 | 3,533 | 220,736 |

The amount expended for the purchase of books was \$6,600.28. Among the most valuable acquisitions to the reference collection may be mentioned the following :

Archives de l'Anthropologie criminelle, 10 vols.; Elwell's Colonial Furniture and Interiors, fol.; Engineering News, 16 vols. 4to; Halevy's Mythology, fol.; Lenoir's Antiquités mexicaines, 2 vols. fol.; Salzenberg's Alt-christliche Baudenkmale von Constantinopel, 2 vols. fol.; Soderholtz's Colonial Architecture and Furniture, fol.; Summer's History of Banking, 4 vols. 4to; Thatcher's Continent of America, 4to.

DONATIONS.

The gifts to the Library during the past year numbered 929 volumes and 1,057 pamphlets. The British Patent Commissioners presented 76 volumes in continuation of the set of English patent specifications in the Library. From the office of the Mayor of the City were received 65 volumes and 34 pamphlets, comprising municipal reports of various cities. Dr. J. B. Hamilton gave 12 volumes and 18 pamphlets. From the various departments of the United States Government at Washington were received 235 volumes and 216 pamphlets. The New York State Library gave 21 volumes and 2 pamphlets. The Royal Library at Stockholm presented 14 volumes of its publications. The Vermont State Library gave 20 volumes and 13 pamphlets of state documents. A complete list of donors is given in Appendix C.

REGISTRATION.

At the close of the Library year the number of persons holding two-year cards which entitled them to draw books for home use was 54,208. The total registrations of the year were 28,207, an increase of 2,206 over the previous annual report. There were issued at the various delivery stations 14,259 cards.

CIRCULATING DEPARTMENT.

The Circulating Department was open for the delivery of books on 302 days during the past year. The number of volumes drawn for home use was 1,215,997, of which 584,455 were given out at the main Library, and 631,542 were issued through the delivery stations. These figures show an increase of 119,246 volumes in the home circulation over the previous year and represent the largest use of the Library in this department during any year of its existence. The daily average circulation was 4,054 volumes, against 3,886 for the previous year. The largest number of books issued on any one day was 8,397, on February 13, 1897; the smallest number 2,258, on August 8, 1896. The amount received from fines paid by delinquent book borrowers was \$5,291.29. The following tables show the home circulation, month by month, for the past two years :

| 1896-97. | | | | 1895-96. | | | |
|------------|-------|--------------|-------------|------------|-------|--------------|--------------|
| MONTH. | Days. | Circulation. | Daily Av'ge | MONTH. | Days. | Circulation. | Daily Av'ge. |
| June | 26 | 88,505 | 3,404 | June | 24 | 85,525 | 3,563 |
| July | 26 | 86,499 | 3,327 | July | 26 | 91,012 | 3,508 |
| August.... | 26 | 82,557 | 3,375 | August.... | 27 | 89,842 | 3,327 |
| September. | 25 | 87,979 | 3,519 | September. | 24 | 81,267 | 3,386 |
| October... | 26 | 96,920 | 3,727 | October... | 27 | 97,426 | 3,609 |
| November. | 23 | 97,650 | 4,246 | November. | 24 | 99,318 | 4,137 |
| December. | 26 | 110,436 | 4,247 | December. | 25 | 102,892 | 4,115 |
| January... | 25 | 113,156 | 4,526 | January... | 26 | 111,217 | 4,280 |
| February.. | 22 | 109,874 | 4,994 | February.. | 23 | 109,561 | 4,763 |
| March..... | 27 | 129,926 | 4,812 | March..... | 26 | 119,085 | 4,580 |
| April..... | 25 | 111,223 | 4,449 | April..... | 25 | 100,274 | 4,002 |
| May..... | 25 | 100,738 | 4,030 | May..... | 25 | 86,167 | 3,446 |
| Total.... | 302 | 1,215,463 | 4,054 | Total.... | 302 | 1,173,586 | 3,893 |

DELIVERY STATIONS.

The number of delivery stations in operation during the past year was thirty-one. More than one-half of the entire

home circulation of books, or 631,542 volumes was through the delivery stations, an increase of 39,392 over the previous year. The amount expended for the compensation of station-keepers and for the transportation of books was \$14,364.16, an average cost of 2.27 cents for each volume circulated.

In Appendix B will be found the detailed statistics of the work done in this department of the Library. The location of the various stations, the persons in charge and the number of books issued are as follows :

| STATION. | LOCATION. | IN CHARGE OF | ISSUES. |
|----------|--------------------------------|-------------------------|---------|
| 1 North. | 349 Division street..... | R. E. Burke..... | 21,270 |
| 2 " | 201 Center street..... | E. J. Black..... | 34,712 |
| 3 " | 477 Lincoln avenue..... | Mrs. E. R. Day..... | 34,062 |
| 4 " | Ravenswood | Historical Society..... | 7,810 |
| 5 " | 128 Fullerton avenue..... | A. B. Wolf..... | 12,803 |
| 6 " | 341 Clybourn avenue..... | Reading Room..... | 6,869 |
| 7 " | Rogers Park..... | Womans Club..... | 11,322 |
| 8 " | 701 Belmont avenue..... | Albert Gorges..... | 11,927 |
| 9 " | Bowmanville..... | Foster Library..... | 561 |
| 1 South. | 154 E. Twenty-second street | P. V. Fitzpatrick | 19,299 |
| 2 " | 233 E. Thirty-first street.... | G. W. Bolton..... | 18,805 |
| 3 " | 72 E. Thirty-seventh street. | Mrs. Alex. Darrow..... | 28,531 |
| 4 " | 663 E. Forty-third street.... | Mrs. Mary Nolan..... | 20,089 |
| 5 " | 134 Fifty-third street..... | Reading Room..... | 24,241 |
| 6 " | 309 Sixty-third street..... | Walter Thacher..... | 43,425 |
| 8 " | South Chicago..... | G. K. Edwards..... | 7,188 |
| 9 " | Chicago Lawn..... | W. T. Roberts..... | 4,607 |
| 10 " | Auburn Park..... | McVay Bros..... | 4,908 |
| 11 " | Cor. Lexington & 57th street | Chicago University.... | 4,951 |
| 12 " | 3841 State street..... | Reading Room..... | 29,101 |
| 1 West. | 278 W. Twelfth street..... | Frank Kotzum..... | 37,779 |
| 2 " | 547 Grand avenue..... | Mrs. Sophie Imbrit.... | 20,984 |
| 3 " | 510 W. Madison street..... | Reading Room..... | 34,092 |
| 4 " | 614 W. Throop street..... | Anton Janes..... | 30,759 |
| 5 " | 1204 Milwaukee avenue.... | Reading Room..... | 28,762 |
| 6 " | 381 S. Western avenue..... | Mrs. Mary Rooks..... | 31,031 |
| 7 " | 862 N. California avenue... | Mrs. E. T. Ainsworth.. | 27,219 |
| 8 " | 1042 Millard avenue..... | Mrs. L. G. Kelly..... | 16,726 |
| 9 " | 21 Blue Island avenue..... | Reading Room..... | 14,273 |
| 11 " | Irving Park..... | Mrs. A. P. Storms..... | 7,997 |
| 12 " | 1274 W. Madison street..... | L. & C. Juergens..... | 34,085 |
| | Public Schools..... | ..... | 588 |
| Total.. | ..... | ..... | 631,676 |

CLASSIFICATION OF THE CIRCULATION.

The classification of the works drawn from the Library for home use, showing the number of volumes issued from each of eight classes and the percentages for the last two years are as follows :

| | Volumes. | Per cent. 1897. | Per cent. 1896. |
|----------------------------|-----------|--------------------|--------------------|
| English Prose Fiction..... | 496,127 | 40.80 | 41.71 |
| Juvenile Literature..... | 280,287 | 23.05 | 21.44 |
| History and Biography..... | 102,144 | 8.40 | 8.24 |
| Geography and Travels..... | 57,759 | 4.75 | 4.49 |
| Sciences and Arts..... | 91,808 | 7.55 | 7.62 |
| Poetry and Drama..... | 43,289 | 3.56 | 3.40 |
| Miscellaneous..... | 25,901 | 2.13 | 2.45 |
| Foreign Languages | 118,682 | 9.76 | 10.55 |
| Total..... | 1,215,997 | 100.00 | 100.00 |

PATENT DEPARTMENT.

In February, 1897, the entire collection of patent reports was removed to the new building and placed in the rooms assigned to this department. The rooms were thrown open to the public and in addition to the patent reports all public documents and the greater part of the collection of bound newspapers may now be consulted there. The increase in the number of readers was very noticeable during the past three months and there is little doubt that with the ample accommodations provided in the new rooms, the usefulness of this department will be greater than it ever has been. The readers during the past year numbered 13,760 and the number of books consulted, so far as a count was kept, was 41,793.

REFERENCE DEPARTMENT.

In the Reference Room 142,709 readers consulted 375,729 volumes. The classification of the books used was as follows: Arts and Sciences, 69,516; History and Biography, 63,503; Bound Periodicals, 62,391; Geography and Travels, 33,952; Language and Literature, 56,499; Encyclopedias and Dictionaries, 20,009; Atlases and Statistics, 10,027; Public Documents, 8,593; Bibliography, 9,040; Miscellaneous, 42,209;

The statistics of this department for the past two years are as follows:

| MONTH. | 1896-97. | | MONTH. | 1895-96. | |
|----------------|-----------|--------------------|---------------|-----------|--------------------|
| | Visitors. | Volumes Consulted. | | Visitors. | Volumes Consulted. |
| June | 9,620 | 25,010 | June..... | 9,609 | 25,564 |
| July | 9,633 | 23,684 | July..... | 12,009 | 28,979 |
| August | 9,478 | 24,388 | August..... | 11,609 | 27,934 |
| September..... | 11,274 | 28,875 | September.... | 11,007 | 27,045 |
| October..... | 12,056 | 30,174 | October | 11,764 | 29,641 |
| November..... | 13,903 | 34,223 | November..... | 12,003 | 30,632 |
| December..... | 14,124 | 34,099 | December..... | 13,130 | 33,270 |
| January..... | 15,790 | 38,726 | January..... | 14,343 | 37,134 |
| February..... | 13,420 | 37,747 | February..... | 13,805 | 35,550 |
| March | 13,289 | 39,245 | March | 13,671 | 34,492 |
| April..... | 10,715 | 31,563 | April..... | 10,478 | 27,230 |
| May | 9,407 | 27,995 | May | 9,750 | 25,214 |
| Total..... | 142,709 | 375,629 | Total..... | 143,178 | 362,685 |

READING ROOM.

The number of visitors to the Reading Room of the main Library was 625,864, to whom were issued 615,387 periodicals, no record being kept of the use of the daily newspapers on file in the room. The average Sunday and holiday attendance was 833. The number of periodicals and newspapers on file was 854. A list of 238 of these, which are donated by publishers, is given in Appendix D. The following classification of the serials on file shows the nationality and frequency of publication of each :

| | Quarterly. | Bi-M. | Monthly. | Semi-M. | Weekly. | Semi-W. | Daily. | Total. |
|--------------------|------------|-----------|------------|-----------|------------|----------|-----------|------------|
| American..... | 33 | 12 | 100 | 13 | 150 | 1 | 50 | 449 |
| British..... | 26 | 2 | 85 | ... | 52 | 1 | 5 | 171 |
| German..... | 5 | 2 | 22 | 11 | 44 | ... | 19 | 103 |
| French..... | 1 | 2 | 6 | 6 | 10 | 1 | 4 | 30 |
| Bohemian..... | ... | 1 | 3 | 4 | 10 | ... | 4 | 22 |
| Italian..... | ... | ... | ... | 2 | 1 | ... | ... | 3 |
| Spanish..... | ... | ... | 1 | 1 | 1 | ... | ... | 3 |
| Norwegian..... | ... | ... | ... | 2 | 11 | ... | 5 | 18 |
| Swedish..... | ... | ... | 1 | ... | 13 | ... | 3 | 17 |
| Danish..... | ... | ... | 1 | ... | 7 | ... | 2 | 10 |
| Dutch..... | ... | ... | 2 | ... | 2 | 1 | ... | 5 |
| Hungarian..... | ... | ... | ... | ... | ... | ... | 1 | 1 |
| Russian..... | ... | ... | 1 | ... | 1 | ... | ... | 2 |
| Polish..... | ... | ... | ... | ... | 11 | ... | 3 | 14 |
| Armenian..... | ... | ... | 1 | ... | 1 | ... | ... | 2 |
| Croatian..... | ... | ... | ... | ... | 2 | ... | ... | 2 |
| Miscellaneous..... | ... | ... | ... | ... | ... | ... | ... | 2 |
| TOTAL..... | 65 | 19 | 314 | 39 | 317 | 4 | 96 | 854 |

The amount expended for newspapers and periodicals for all of the reading rooms was \$3,798.23. Of the bound newspapers which are kept in the Reading Room, 6,887 volumes were consulted. The statistics of attendance and use of periodicals during the past two years are as follows :

| MONTH. | 1896-97. | | | MONTH. | 1895-96. | | |
|-----------|-----------|---------------------|--------------------------|-----------|-----------|---------------------|--------------------------|
| | Visitors. | Periodicals Issued. | Average Sunday Visitors. | | Visitors. | Periodicals Issued. | Average Sunday Visitors. |
| June..... | 42,656 | 41,705 | 614 | June..... | 41,167 | 40,555 | 752 |
| July..... | 45,593 | 45,292 | 747 | July..... | 45,294 | 45,051 | 725 |
| August.. | 43,544 | 42,709 | 656 | August.. | 43,456 | 44,076 | 681 |
| Sept'ber. | 47,514 | 46,070 | 774 | Sept'ber. | 39,491 | 39,622 | 714 |
| October. | 51,489 | 50,421 | 850 | October. | 47,955 | 48,042 | 885 |
| Nov'ber. | 56,011 | 54,742 | 983 | Nov'ber. | 49,553 | 50,054 | 932 |
| Dec'ber. | 60,057 | 58,721 | 1,012 | Dec'ber. | 54,198 | 56,118 | 953 |
| January. | 63,435 | 63,102 | 1,099 | January.. | 60,129 | 61,974 | 1,130 |
| February | 58,184 | 57,278 | 1,120 | February | 57,472 | 59,127 | 1,077 |
| March... | 61,669 | 61,016 | 1,064 | March... | 59,292 | 59,902 | 1,098 |
| April.... | 50,502 | 49,933 | 871 | April.... | 45,464 | 45,576 | 803 |
| May | 45,210 | 44,398 | 816 | May | 40,785 | 39,844 | 665 |
| Total.. | 625,864 | 615,387 | 883 | Total.. | 584,256 | 589,831 | 867 |

BRANCH READING ROOMS.

The aggregate attendance at the six branch reading rooms was 311,770, an increase of 18,257 over the previous year. The issues of periodicals numbered 274,699, and of books, 130,998. The average attendance at each room on Sundays and holidays, was 169. The locations of the various rooms and the statistics of their use during the past year are as follows :

| No. | LOCATION. | Serials on File. | Books in R. R. | Attendance. | Serials Issued. | Books Issued. | Average Sunday Attendance. |
|-------------|---------------------------------------|------------------|----------------|-------------|-----------------|---------------|----------------------------|
| I. | 1204 Milwaukee av., near North av.... | 104 | 1,357 | 71,151 | 40,485 | 38,926 | 262 |
| II. | 3841 State st., near 39th st..... | 67 | 1,266 | 44,188 | 37,535 | 17,813 | 145 |
| III. | 341 Clybourn avenue near North av.... | 112 | 1,329 | 40,691 | 36,313 | 19,131 | 133 |
| IV. | 134 53d street, Hyde Park | 75 | 2,348 | 40,345 | 45,783 | 21,833 | 135 |
| V. | 21 Blue Island av., near Harrison st. | 79 | 1,259 | 40,307 | 44,840 | 15,377 | 115 |
| VI. | 510 West Madison street | 77 | 1,741 | 75,088 | 69,743 | 17,918 | 225 |
| Total | | 514 | 9,300 | 311,770 | 274,699 | 130,998 | 169 |

FINDING LISTS AND CARD CATALOGUES.

Four quarterly bulletins (Nos. 36-39) were published during the past year. These contained in classified form the titles of all new books added to the Library. The catalogue of English prose fiction and juvenile books has been revised and is now in press. The twenty-one sections comprising the complete finding lists have been kept in print, and the amount derived from the sale of the same was \$441.71

The official card catalogue has been kept complete and up to date. In addition to the new cards which have been written there has been considerable work done in revising and copying old cards. Progress on the public card catalogue has been retarded, owing to the resignation of three of the trained cataloguers engaged in the work. The author and title cards for the entire catalogue will, however, be ready for use in the new building, and subject cards are being now written at the rate of 6,000 per month.

ADMINISTRATION.

The amount expended for salaries during the past year was \$81,448.11. The complete roster of the employes numbered one hundred and eighteen persons. There were regularly employed at the main Library, seventy-seven persons in the day service and nine in the evening service. Three attendants were transferred to the new building, two of whom were placed in charge of the patent reports and public documents, and one was detailed as assistant doorman. In addition to these regular employes there were five substitutes, six janitors (one of whom was on duty at the new building), one substitute janitor, one nightwatchman, one expressman and one electrician. There were also twelve persons employed in the branch reading room service.

BINDING.

There were sent to the various binderies with which the Library has contracts for binding, 20,353 books. Of these, 14,331 were newly bound or re-bound, and 6,022 were re-sewed and placed in the old covers. The attendants in the repair department of the Library mended and repaired 37,284 books. The amount expended for binding was \$7,786.73.

ANNUAL INVENTORY.

During the months of March, April and May the annual inventory was taken in the usual manner, without closing the Library. The result showed 241 volumes unaccounted for. Of the 218 volumes reported missing last year, 73 have since been found. Seven of the books reported missing in previous years have also been recovered.

Respectfully submitted,

FREDERICK H. HILD,

Librarian.

CHICAGO, June 12, 1897.

APPENDIX A. (1.)

SUMMARY OF STATISTICS FROM 1874 TO 1881.

| | 1874* | 1875. | 1876. | 1877. | 1878. | 1879. | 1880. | 1881. |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Books in Library..... | 18,183 | 39,236 | 49,024 | 51,409 | 57,084 | 60,423 | 67,772 | 77,140 |
| Total Accessions | 11,331 | 21,053 | 10,251 | 3,399 | 7,876 | 4,287 | 8,440 | 11,900 |
| Purchased..... | 9,899 | 20,122 | 8,056 | 2,441 | 6,544 | 3,010 | 7,799 | 9,814 |
| Donated..... | 1,432 | 969 | 2,195 | 95 | 1,333 | 1,277 | 641 | 2,106 |
| Expended for Books..... | \$10,733.11 | \$28,410.63 | \$10,784.19 | \$2,504.17 | \$9,078.06 | \$2,907.24 | \$7,404.52 | \$10,843.72 |
| Worn out..... | ..... | 38 | 463 | 1,015 | 1,301 | 1,848 | 1,137 | 2,502 |
| Unaccounted for..... | ..... | 322 | 421 | 286 | 186 | 210 | 160 | 281 |
| Pamphlets, Accession of..... | 2,638 | 1,944 | 354 | 282 | 419 | 1,037 | 487 | 848 |
| Registration of New Book Borrowers..... | 2,574 | 20,710 | 9,843 | 6,932 | 11,831 | 9,130 | 9,505 | 10,905 |
| Circulation of Books..... | 7,659 | 399,156 | 405,747 | 398,090 | 354,506 | 368,428 | 306,751 | 352,801 |
| Daily Average..... | 295 | 1,313 | 1,366 | 1,301 | 1,166 | 1,205 | 1,002 | 1,161 |
| Largest issue in one Day..... | 574 | 2,539 | 2,631 | 2,501 | 3,309 | 2,339 | 2,176 | 2,421 |
| Smallest issue in one Day..... | 70 | 329 | 698 | 732 | 572 | 662 | 613 | 626 |
| Received for Fines..... | \$3.65 | \$2,618.72 | \$2,831.44 | \$2,710.64 | \$1,959.57 | \$1,882.70 | \$1,775.72 | \$2,064.35 |
| Reading Room, Periodicals on File..... | 314 | 288 | 285 | 220 | 210 | 228 | 221 | 241 |
| Newspapers on File..... | 123 | 80 | 104 | 91 | 98 | 118 | 128 | 120 |
| Visitors..... | 133,017 | 236,021 | 228,795 | 199,760 | 181,052 | 186,588 | 180,536 | 302,796 |
| Periodicals issued..... | 88,682 | 135,355 | 138,934 | 127,423 | 115,275 | 119,547 | 124,597 | 184,617 |
| Sunday Readers, Average..... | 423 | 560 | 360 | 296 | 280 | 290 | 207 | 688 |
| Cost of Serials..... | \$2,199.12 | \$1,914.94 | \$2,300.55 | \$1,495.14 | \$1,277.28 | \$1,635.52 | \$1,705.54 | \$1,677.66 |
| Reference Department, Visitors..... | ..... | ..... | 5,528 | 8,376 | 16,916 | 20,214 | 23,105 | 32,340 |
| Issues..... | ..... | ..... | 18,283 | 15,790 | 37,498 | 63,691 | 68,115 | 97,564 |
| Binding, Cost of..... | \$1,028.87 | \$1,991.80 | \$4,356.57 | \$2,993.25 | \$2,723.55 | \$3,984.02 | \$2,167.01 | \$3,364.65 |
| Amount paid for Salaries..... | \$7,725.78 | \$16,545.00 | \$14,705.20 | \$11,972.47 | \$13,274.90 | \$13,571.00 | \$14,559.00 | \$17,688.35 |

*The issues and other statistics of 1874 comprise only the work of the single month of May.

APPENDIX. A (2).

SUMMARY OF STATISTICS FROM 1882 TO 1889.

| | 1882. | 1883. | 1884. | 1885. | 1886. | 1887. | 1888. | 1889. |
|---|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Books in the Library..... | | | | | | | | |
| Total Accessions..... | 87,272 | 94,606 | 106,341 | 111,621 | 119,510 | 129,129 | 138,002 | 149,156 |
| Purchased..... | 11,038 | 9,416 | 12,972 | 6,836 | 10,599 | 11,352 | 13,287 | 12,795 |
| Donated..... | 9,691 | 8,005 | 11,799 | 5,692 | 8,245 | 9,700 | 10,124 | 11,714 |
| Expended for..... | 1,347 | 1,351 | 1,173 | 1,144 | 2,354 | 1,635 | 3,139 | 1,081 |
| Worn out..... | 10,052.62 \$ | 10,814.32 \$ | 12,905.86 \$ | 6,899.14 \$ | 9,405.38 \$ | 10,439.19 \$ | 12,124.76 \$ | 15,933.08 \$ |
| Unaccounted for..... | 906 | 2,032 | 1,237 | 698 | 1,816 | 734 | 2,938 | 2,090 |
| Pamphlets, Accessions of..... | 297 | 383 | 775 | 362 | 202 | 85 | 81 | 132 |
| New Registration of Book Borrowers..... | 2,133 | 1,442 | 604 | 3,201 | 1,327 | 2,643 | 12,373 | 3,831 |
| Home Circulation of Books..... | 10,241 | 11,174 | 12,699 | 13,297 | 13,845 | 15,383 | 15,362 | 16,544 |
| Daily Average..... | 349,977 | 376,475 | 429,313 | 519,691 | 608,708 | 626,825 | 709,527 | 749,445 |
| Largest issue in one day..... | 1,144 | 1,259 | 1,404 | 1,704 | 2,040 | 2,263 | 2,311 | 2,465 |
| Smallest issue in one day..... | 2,358 | 2,654 | 3,317 | 3,720 | 3,897 | 4,368 | 3,067 | 4,760 |
| Received for fines..... | 676 | 637 | 694 | 1,007 | 1,221 | 1,360 | 1,095 | 1,526 |
| Reading Room, Periodicals on File..... | \$ 2,169.18 \$ | \$ 2,220.26 \$ | \$ 2,954.32 \$ | \$ 3,088.00 \$ | \$ 3,673.44 \$ | \$ 3,444.63 \$ | \$ 4,053.33 \$ | \$ 4,192.72 \$ |
| Newspapers on File..... | 252 | 265 | 284 | 328 | 325 | 342 | 337 | 394 |
| Visitors..... | 124 | 123 | 141 | 148 | 156 | 122 | 152 | 179 |
| Periodicals issued..... | 366,118 | 543,456 | 603,302 | 623,245 | 655,816 | 184,947 | 237,357 | 341,814 |
| Sunday Readers, Average..... | 199,471 | 264,640 | 285,422 | 282,613 | 300,305 | 205,519 | 264,622 | 323,365 |
| Cost of Serials..... | 1,090 | 1,587 | 1,705 | 1,630 | 1,743 | 396 | 392 | 496 |
| Reference Department, Visitors..... | \$ 1,394.34 \$ | \$ 2,158.28 \$ | \$ 1,797.72 \$ | \$ 1,941.93 \$ | \$ 1,444.84 \$ | \$ 1,503.31 \$ | \$ 1,179.15 \$ | \$ 2,308.97 \$ |
| Issues..... | 38,484 | 42,734 | 59,696 | 57,690 | 66,498 | 79,345 | 101,714 | 117,810 |
| Binding, Cost of..... | 117,074 | 134,408 | 175,360 | 145,652 | 157,345 | 208,470 | 251,310 | 328,765 |
| Amount Paid for Salaries..... | \$ 3,843.32 \$ | \$ 2,814.48 \$ | \$ 3,385.61 \$ | \$ 3,618.01 \$ | \$ 4,206.54 \$ | \$ 3,760.18 \$ | \$ 4,744.35 \$ | \$ 4,941.44 \$ |
| Delivery Stations—Books issued..... | 20,853.92 \$ | \$ 22,486.58 \$ | \$ 25,159.43 \$ | \$ 28,620.77 \$ | \$ 32,202.76 \$ | \$ 37,621.98 \$ | \$ 37,878.36 \$ | \$ 41,353.00 \$ |
| | | | | 65,271 | 108,893 | 123,035 | 136,082 | 152,006 |

APPENDIX A (3).

SUMMARY OF STATISTICS FROM 1890 TO 1897.

| | 1890. | 1891. | 1892. | 1893. | 1894. | 1895. | 1896. | 1897. |
|---|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Books in Library..... | 156,242 | 166,475 | 177,178 | 189,350 | 198,827 | 211,157 | 217,203 | 220,736 |
| Total Accessions..... | 10,908 | 20,078 | 14,694 | 16,401 | 13,237 | 18,485 | 10,485 | 7,171 |
| Purchased..... | 10,073 | 16,206 | 12,890 | 14,421 | 9,902 | 16,727 | 7,607 | 5,349 |
| Donated..... | 835 | 1,165 | 784 | 929 | 1,815 | 975 | 1,917 | 929 |
| Expended for..... | \$ 11,148.60 | \$ 17,669.22 | \$ 15,785.44 | \$ 16,647.83 | \$ 15,052.21 | \$ 19,431.18 | \$ 10,606.30 | \$ 6,600.28 |
| Worn out..... | 3,507 | 4,156 | 3,559 | 3,731 | 3,188 | 5,595 | 3,896 | 3,167 |
| Unaccounted for..... | 144 | 134 | 164 | 170 | 226 | 197 | 218 | 241 |
| Pamphlets, Accessions of..... | 1,635 | 1,873 | 1,643 | 1,297 | 1,387 | 1,236 | 1,724 | 1,213 |
| New Registration of Book Borrowers..... | 19,934 | 23,815 | 24,413 | 22,976 | 26,341 | 27,615 | 26,001 | 28,207 |
| Home Circulation of Books..... | 843,971 | 938,502 | 1,014,331 | 988,001 | 1,027,219 | 1,147,862 | 1,173,586 | 1,215,997 |
| Daily Average..... | 2,830 | 3,095 | 3,309 | 3,272 | 3,424 | 3,816 | 3,886 | 4,054 |
| Largest issue, one day..... | 5,272 | 5,291 | 6,975 | 5,151 | 6,000 | 7,731 | 7,191 | 8,397 |
| Smallest issue, one day..... | 1,720 | 1,727 | 2,291 | 528 | 2,301 | 2,470 | 2,290 | 2,258 |
| Received for Fines..... | \$ 4,853.75 | \$ 5,350.88 | \$ 5,943.31 | \$ 6,441.47 | \$ 6,086.07 | \$ 5,543.88 | \$ 5,790.65 | \$ 5,291.29 |
| Reading Room, Periodicals on File..... | 390 | 468 | 492 | 539 | 549 | 578 | 849 | 854 |
| Newspapers on File..... | 197 | 194 | 212 | 208 | 201 | 225 | | |
| Visitors..... | 436,412 | 492,837 | 560,760 | 558,216 | 618,331 | 614,884 | 584,256 | 625,864 |
| Periodicals issued..... | 389,192 | 439,243 | 548,920 | 558,900 | 631,477 | 631,477 | 589,931 | 616,387 |
| Sunday Readers, Average..... | 638 | 738 | 760 | 825 | 828 | 853 | 867 | 883 |
| Cost of Serials..... | \$ 2,174.33 | \$ 2,966.95 | \$ 341.095 | \$ 3,795.42 | \$ 4,252.08 | \$ 3,851.35 | \$ 4,217.38 | \$ 3,798.23 |
| Reference Department, Visitors..... | 103,059 | 98,964 | 110,962 | 116,237 | 138,985 | 131,750 | 143,178 | 142,700 |
| Issues..... | 331,813 | 326,619 | 328,101 | 296,101 | 373,122 | 325,371 | 362,685 | 375,729 |
| Binding, Cost of..... | \$ 5,280.42 | \$ 6,786.41 | \$ 7,079.85 | \$ 6,393.33 | \$ 8,519.44 | \$ 10,235.58 | \$ 10,343.37 | \$ 7,786.73 |
| Amount paid for Salaries..... | \$ 45,919.61 | \$ 51,440.54 | \$ 57,717.09 | \$ 61,272.76 | \$ 69,060.61 | \$ 75,167.78 | \$ 79,981.29 | \$ 81,448.11 |
| Delivery Stations—Books Issued..... | 201,257 | 294,880 | 407,790 | 422,812 | 446,168 | 545,866 | 592,150 | 631,542 |

DELIVERY STATION STATISTICS, JUNE 1, 1896 TO MAY 31, 1897.

| STATION. | June. | July. | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | Total. |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| 1 North..... | 1,787 | 1,360 | 1,314 | 1,390 | 1,559 | 1,719 | 1,822 | 1,825 | 1,010 | 2,389 | 2,011 | 2,184 | 21,270 |
| 2 N..... | 2,551 | 2,281 | 2,179 | 2,257 | 2,512 | 2,573 | 3,014 | 3,232 | 3,081 | 3,912 | 3,638 | 3,482 | 34,712 |
| 3 N..... | 2,605 | 2,594 | 2,247 | 2,476 | 2,657 | 2,601 | 2,830 | 2,953 | 3,052 | 3,639 | 3,310 | 3,080 | 34,062 |
| 4 N..... | 432 | 413 | 462 | 509 | 592 | 507 | 740 | 743 | 757 | 802 | 883 | 700 | 7,810 |
| 5 N..... | 919 | 879 | 818 | 921 | 973 | 1,003 | 1,290 | 1,231 | 1,195 | 1,339 | 1,058 | 1,087 | 12,803 |
| 6 N..... | 624 | 469 | 427 | 423 | 482 | 541 | 591 | 637 | 628 | 715 | 738 | 594 | 6,869 |
| 7 N..... | 695 | 770 | 766 | 772 | 873 | 837 | 904 | 1,007 | 1,088 | 1,326 | 1,128 | 1,066 | 11,322 |
| 8 N..... | 818 | 797 | 694 | 729 | 970 | 1,008 | 1,162 | 1,129 | 1,051 | 1,263 | 1,222 | 1,084 | 11,927 |
| 9 N..... | 85 | 37 | ..... | ..... | 3 | 9 | 35 | 72 | 78 | 99 | 63 | 80 | 561 |
| 1 South..... | 1,605 | 1,616 | 1,511 | 1,492 | 1,583 | 1,610 | 1,768 | 1,589 | 1,059 | 1,878 | 1,584 | 1,404 | 19,299 |
| 2 S..... | 1,597 | 1,457 | 1,260 | 1,314 | 1,499 | 1,378 | 1,633 | 1,678 | 1,740 | 2,023 | 1,715 | 1,541 | 18,805 |
| 3 S..... | 2,133 | 2,239 | 1,934 | 2,040 | 2,200 | 2,336 | 2,648 | 2,718 | 2,574 | 2,880 | 2,434 | 2,305 | 28,531 |
| 4 S..... | 1,775 | 1,650 | 1,443 | 1,478 | 1,629 | 1,601 | 1,714 | 1,767 | 1,704 | 2,203 | 2,041 | 1,924 | 20,989 |
| 5 S..... | 1,879 | 1,690 | 1,746 | 1,764 | 1,915 | 1,944 | 2,146 | 2,170 | 2,056 | 2,586 | 2,229 | 2,116 | 24,241 |
| 6 S..... | 3,028 | 2,957 | 2,608 | 2,862 | 3,229 | 3,339 | 3,976 | 3,942 | 4,030 | 5,048 | 4,286 | 4,030 | 43,425 |
| 8 S..... | 487 | 469 | 466 | 507 | 509 | 496 | 650 | 687 | 689 | 829 | 722 | 677 | 7,188 |
| 9 S..... | 202 | 334 | 327 | 313 | 374 | 380 | 383 | 430 | 431 | 527 | 430 | 386 | 4,607 |
| 10 S..... | 477 | 414 | 366 | 358 | 369 | 331 | 396 | 420 | 385 | 504 | 426 | 462 | 4,908 |
| 11 S..... | 354 | 327 | 333 | 317 | 384 | 438 | 405 | 406 | 457 | 581 | 481 | 458 | 4,951 |
| 12 S..... | 2,345 | 2,180 | 1,915 | 2,018 | 2,208 | 2,141 | 2,662 | 2,650 | 2,629 | 3,017 | 2,690 | 2,556 | 29,101 |
| 1 West..... | 2,751 | 2,417 | 2,158 | 2,309 | 2,827 | 2,849 | 3,488 | 3,513 | 3,532 | 4,333 | 3,807 | 3,795 | 37,779 |
| 2 W..... | 1,532 | 1,606 | 1,526 | 1,779 | 1,504 | 1,496 | 1,762 | 1,826 | 1,922 | 2,291 | 2,008 | 1,942 | 20,084 |
| 3 W..... | 2,430 | 2,388 | 2,264 | 2,660 | 2,806 | 2,760 | 3,145 | 2,993 | 2,918 | 3,518 | 3,199 | 3,011 | 34,092 |
| 4 W..... | 1,947 | 1,680 | 1,481 | 1,749 | 1,997 | 2,156 | 3,012 | 3,463 | 3,494 | 4,073 | 3,052 | 2,655 | 30,759 |
| 5 W..... | 2,321 | 2,258 | 2,113 | 2,044 | 2,249 | 2,258 | 2,695 | 2,599 | 2,577 | 3,025 | 2,501 | 2,222 | 28,761 |
| 6 W..... | 2,544 | 2,383 | 1,886 | 2,184 | 2,546 | 2,510 | 2,836 | 2,885 | 2,736 | 3,212 | 2,761 | 2,548 | 31,031 |
| 7 W..... | 1,930 | 1,936 | 1,707 | 1,840 | 2,052 | 2,011 | 2,461 | 2,424 | 2,356 | 2,958 | 2,922 | 2,622 | 27,219 |
| 8 W..... | 1,124 | 1,133 | 1,185 | 1,153 | 1,224 | 1,174 | 1,308 | 1,338 | 1,476 | 1,997 | 1,911 | 1,703 | 16,726 |
| 9 W..... | 1,030 | 1,050 | 913 | 1,040 | 1,100 | 1,045 | 1,310 | 1,373 | 1,203 | 1,559 | 1,362 | 1,198 | 14,273 |
| 11 W..... | 512 | 583 | 643 | 622 | 563 | 622 | 632 | 734 | 677 | 877 | 787 | 745 | 7,997 |
| 12 W..... | 2,521 | 2,487 | 2,175 | 2,333 | 2,516 | 2,595 | 3,136 | 3,110 | 3,066 | 3,832 | 3,395 | 2,919 | 34,085 |
| Public Schools..... | ..... | ..... | ..... | 77 | 69 | 115 | 44 | 54 | 37 | 63 | 67 | 62 | 588 |
| Total..... | 47,100 | 44,854 | 40,957 | 43,430 | 48,112 | 48,504 | 56,697 | 57,598 | 57,338 | 60,388 | 60,970 | 56,728 | 631,676 |

APPENDIX C.

LIST OF DONORS.

| | VOLS. | PAMP. |
|--|-------|-------|
| Aberdeen (Scotland) Public Library..... | .. | I |
| Aguilar Free Library Society, New York City..... | .. | I |
| Alfred University, Alfred, N. Y..... | .. | I |
| Allahabad, <i>Indian Press</i> | I | .. |
| Allen, Mrs. Margaret A..... | I | .. |
| American Antiquarian Society..... | .. | I |
| American Baptist Home Mission Society..... | I | .. |
| American Bar Association..... | .. | I |
| American Board of Commissioners for Foreign Missions. | .. | 3 |
| American Conference on International Arbitration..... | I | .. |
| American Congregational Association..... | .. | I |
| American Dental Association..... | 2 | .. |
| American Forestry Association..... | .. | 3 |
| American Humane Association..... | .. | I |
| American Institute of Architects..... | I | .. |
| American Institute of Mining Engineers..... | I | .. |
| American Laryngological Association..... | I | .. |
| American Medico-Psychological Association..... | I | .. |
| American Philological Association..... | .. | I |
| American Presbyterian Mission..... | .. | I |
| American Type Founders Company..... | I | .. |
| Amherst College..... | .. | I |
| Andover (Mass.) Theological Seminary..... | .. | I |
| Ann Arbor (Mich.), <i>Michigan Presbyterian</i> | .. | I |
| Argentine Republic, Director General de Correos y Tele- grafos, Buenos Ayres..... | I | .. |
| Armour Institute of Technology, Chicago..... | .. | I |
| Atwood, W. W..... | I | .. |
| Aubrey, Dr. W. H. S..... | I | .. |
| Ayres, Philip W..... | .. | I |
| Baillie's Institution Free Library, Glasgow..... | .. | I |

| | VOLS. | PAMP. |
|--|-------|-------|
| Bangor (Me.) Public Library..... | .. | 1 |
| Barker, G. W..... | 12 | 2 |
| Barnard, Henry..... | 11 | .. |
| Bath (Eng.), Mayor of..... | 1 | .. |
| Batten, Dr. John M..... | 1 | .. |
| Battersea (London, Eng.), Public Libraries..... | .. | 1 |
| Belleville (Ill.), Public Library..... | .. | 1 |
| Beloit College..... | .. | 1 |
| Berlin, Freiherrlich v. Lipperheide'sche Büchersammlung .. | .. | 1 |
| Berlin, Koenigliche Bibliothek..... | 2 | .. |
| Birmingham (Eng.), Free Libraries Committee..... | .. | 1 |
| Bishop, Seth Scott, M. D..... | .. | 4 |
| Blackburn (Eng.) Free Library..... | .. | 1 |
| Blinn, H. C..... | .. | 1 |
| Bliss, Charles H..... | 1 | .. |
| Bolton, Charles Knowles..... | 1 | .. |
| Boston, Board of Overseers of the Poor..... | .. | 1 |
| Boston, City Hospital..... | 2 | .. |
| Boston, Handel and Haydn Society..... | 1 | .. |
| Boston, Home for Aged Men..... | .. | 1 |
| Boston, Public Library..... | 3 | 7 |
| Boston Associated Charities..... | .. | 1 |
| Boston Museum of Fine Arts..... | .. | 1 |
| Boston Provident Association..... | .. | 1 |
| Boston Young Men's Christian Union..... | 1 | .. |
| Botanical Society of America..... | .. | 1 |
| Bowdoin College Library..... | .. | 4 |
| Bradley, Isaac S..... | .. | 1 |
| Brecht, Gus. V., Butchers' Supply Company..... | .. | 1 |
| Bridgeport (Conn.), Public Library..... | .. | 1 |
| Brinton, Daniel G., M. D..... | .. | 1 |
| Brisbane (Queensland), Patents' Office..... | 1 | .. |
| British Patent Commissioners..... | 76 | .. |
| Brookline (Mass.), Public Library..... | .. | 2 |
| Brooklyn, New England Society..... | 1 | .. |
| Brooklyn Library..... | .. | 2 |
| Brown University..... | 1 | 1 |
| Brymner, Douglas, LL. D..... | 1 | .. |
| Buffalo Historical Society..... | .. | 1 |
| Buffalo Library..... | .. | 2 |
| Bunker Hill Monument Association..... | 1 | 1 |
| Burnham, S. W..... | .. | 6 |

| | VOLS. | PAMP. |
|--|-------|-------|
| Busse, George..... | 1 | .. |
| Cadbury, Richard..... | 1 | .. |
| California, Society of Colonial Wars..... | .. | 1 |
| California, Sons of the Revolution..... | .. | 1 |
| California, State Board of Fish Commissioners..... | 1 | .. |
| California, University of..... | 2 | 5 |
| California State Library..... | 1 | .. |
| California State Mining Bureau..... | 1 | 4 |
| Calkins, William Wirt..... | .. | 1 |
| Calumet Book & Engraving Company..... | 1 | .. |
| Cambridge (Mass.), Public Library..... | .. | 1 |
| Cameron, Hon. J. D..... | .. | 1 |
| Canada, Geological Survey..... | 1 | 1 |
| Canada, Royal Society..... | 1 | .. |
| Carnegie Free Library, Allegheny, Pa..... | .. | 1 |
| Carus, Dr. Paul..... | .. | 2 |
| Case, Dr. L. W..... | .. | 1 |
| Catholic University of America, Washington, D. C..... | 2 | .. |
| Chamberlin, Anna E..... | 1 | .. |
| Charles, Fred L..... | .. | 1 |
| Charleston (S. C.), College of..... | .. | 1 |
| Chicago, Art Institute..... | .. | 7 |
| Chicago, Board of Education..... | 4 | .. |
| Chicago, Board of Trade..... | .. | 1 |
| Chicago, Citizens' Association of..... | .. | 2 |
| Chicago, City of..... | 6 | .. |
| Chicago, Civil Service Commission..... | 4 | .. |
| Chicago, <i>Daily News</i> Fresh Air Fund..... | 1 | .. |
| Chicago, Holland Society..... | 1 | .. |
| Chicago, Home for Aged Jews..... | .. | 2 |
| Chicago, House of Correction..... | .. | 1 |
| Chicago, Jewish Training School..... | .. | 1 |
| Chicago, Mayor's Office..... | 65 | 34 |
| Chicago, Sanitary District, Board of Trustees..... | 6 | 37 |
| Chicago, <i>Times-Herald</i> | 1 | .. |
| Chicago, Union League Club..... | 1 | .. |
| Chicago, University of..... | .. | 3 |
| Chicago, Visitation and Aid Society..... | .. | 1 |
| Chicago, West Side Young Men's Christian Association.. | 8 | 1 |
| Chicago Academy of Sciences..... | .. | 1 |
| Chicago Architectural Club..... | .. | .. |
| Chicago College of Pharmacy..... | .. | 1 |

| | VOLS. | PAMP. |
|---|-------|-------|
| Chicago Fire Department..... | 2 | .. |
| Chicago Historical Society..... | .. | 5 |
| Chicago Law School..... | .. | 1 |
| Church, Miss Emma..... | 1 | .. |
| Cincinnati, Public Library..... | 1 | 5 |
| Cincinnati College..... | .. | 1 |
| Claypool, Edward A..... | 2 | 1 |
| Clerkenwell, (London, Eng.) Public Library..... | .. | 1 |
| Cleveland Public Library..... | .. | 3 |
| Cobden Club..... | .. | 4 |
| Coin Publishing Co..... | 5 | .. |
| Collins, Fred S..... | 1 | .. |
| Columbia University..... | .. | 3 |
| Conner, P. S. P..... | 1 | .. |
| Cook County (Ill.) Board of Commissioners..... | 1 | .. |
| Cornell University..... | .. | 1 |
| Council Bluffs (Iowa), Free Public Library..... | .. | 1 |
| Cribben, Sexton & Company..... | .. | 1 |
| Crocker, Uriel H..... | 1 | .. |
| Cunningham, Prof. G. W..... | 1 | .. |
| Cyr, Narcisse..... | .. | 1 |
| Damrell & Upham..... | 1 | .. |
| Daniels, George H..... | .. | 1 |
| Dante Society..... | .. | 1 |
| Denison, Thomas S..... | 3 | .. |
| Denver, Public Library..... | .. | 8 |
| Detroit, Executive Committee, Centennial Celebration of Evacuation by British..... | 1 | .. |
| Detroit, Public Library..... | .. | 1 |
| Dona Anna (N. M.), Trustee for the Children of Shalam..... | .. | 1 |
| Dresser, Horatio W..... | 1 | .. |
| Dreyer, E. S., & Company..... | 1 | .. |
| Duchesne, Georges..... | 1 | .. |
| Dutton Medical College..... | .. | 1 |
| Dziatzko, Dr. K..... | .. | 1 |
| Egleston, Thomas, LL. D..... | 1 | .. |
| Emerson, E. W., M. D..... | .. | 1 |
| Emerson, Prof. and Mrs. Joseph..... | 2 | .. |
| Enoch Pratt Free Library..... | .. | 1 |
| Errant, Joseph W..... | .. | 2 |
| Evanston (Ill.), Free Public Library..... | .. | 1 |
| Eyller, John..... | 2 | .. |

| | VOLS. | PAMP. |
|--|-------|-------|
| Eyller, Mrs. Doris..... | 4 | 1 |
| Farrand, Max..... | 1 | .. |
| Felsenthal, Dr. B..... | .. | 4 |
| Felton, Charles E..... | 1 | 1 |
| Field Columbian Museum, Chicago..... | .. | 6 |
| Fletcher Free Library..... | .. | 1 |
| Florence, Biblioteca Nazionale Centrale..... | .. | 1 |
| Florence, Reale Istituto di Studi Superiori pratici di Perfezionamento..... | 5 | .. |
| Frankfort (on the Main), Freiherrlich Carl v. Rothschild- 'sche offentliche Bibliothek..... | .. | 1 |
| French, A. D. W..... | 1 | .. |
| Galena (Ill.), Public Library..... | .. | 1 |
| Galloway, David H., M. D..... | .. | 2 |
| Gauss, E. F. L., 1 map..... | 1 | 4 |
| Germany, Kaiserlich Deutsches Post-Zeitungsamt..... | 1 | .. |
| Gifford, John..... | .. | 1 |
| Globe Company..... | .. | 1 |
| Gloversville (N. Y.) Free Library..... | .. | 1 |
| Goldzier, Hon. Julius..... | 2 | .. |
| Goodwin, Daniel..... | 1 | .. |
| Grand Rapids (Mich.), Public Schools Library..... | .. | 1 |
| Green, Dr. Samuel A..... | 1 | 17 |
| Greene, Jacob L..... | 1 | .. |
| Guthrie, Ossian..... | .. | 2 |
| Hale, E. M., M. D..... | .. | 2 |
| Hamilton, Dr. John B..... | 12 | 18 |
| Hammond Typewriter Company..... | .. | 1 |
| Hart, Mrs. George A..... | 2 | .. |
| Hartford (Conn.), City Clerk..... | 1 | .. |
| Hartford (Conn.), Public Library..... | .. | 3 |
| Hartford (Conn.), Theological Seminary..... | .. | 1 |
| Harvard University..... | 3 | .. |
| Hauxhurst, Arthur..... | 19 | .. |
| Hedenberg, James W..... | .. | 16 |
| Hesing, Hon. Washington..... | .. | 1 |
| Hild, Frederick H..... | 2 | 4 |
| Hill, Thomas E..... | 1 | .. |
| Hoar, George F..... | .. | 1 |
| Hoepli, Ulrico..... | 1 | .. |
| Holme, Frank..... | 9 | .. |
| Horine, Mrs. C. H..... | 2 | .. |

| | VOLS. | PAMP. |
|--|-------|-------|
| Hotchkiss, George W..... | 1 | .. |
| Howard & Doyle..... | 1 | .. |
| Howard Memorial Library, New Orleans..... | .. | 8 |
| Humphreys, H. H..... | .. | 1 |
| Illinois, Inspector of Factories..... | 1 | 2 |
| Illinois, Secretary of State..... | .. | 5 |
| Illinois, Society of Colonial Wars..... | 1 | 1 |
| Illinois, Society of Engineers and Surveyors..... | 1 | .. |
| Illinois, Soldiers' and Sailors' Home..... | .. | 1 |
| Illinois, State Board of Agriculture..... | 1 | 1 |
| Illinois, State Laboratory of Natural History..... | .. | 5 |
| Illinois, University of..... | 2 | .. |
| Illinois Humane Society..... | .. | 3 |
| I. O. B. B..... | .. | 2 |
| Indian Rights Association..... | .. | 6 |
| Indianapolis, Public Library..... | .. | 1 |
| Ingalls, Capt. James M..... | .. | 2 |
| Ingram, John K..... | .. | 1 |
| Iowa, Geological Survey..... | 1 | .. |
| Iowa State University..... | .. | 1 |
| Jacobs, John A..... | 1 | 1 |
| Jamaica Agricultural Society..... | 1 | .. |
| James, Prof. Edmund J..... | 6 | 29 |
| Jersey City (N. J.), Free Public Library..... | .. | 1 |
| Johns Hopkins University..... | .. | 1 |
| Kansas, Adjutant-General..... | 1 | .. |
| Kansas, Bureau of Labor and Industry..... | 1 | .. |
| Kansas, State Board of Agriculture..... | 2 | .. |
| Kastelic, George A..... | .. | 1 |
| Keeley Company, The Leslie E..... | .. | 1 |
| Keidel, Prof. George C., Ph. D..... | 1 | 1 |
| Kelley, Miss Florence..... | .. | 1 |
| Kennon, Lieut. L. W. V..... | .. | 1 |
| Kent, Miss M. R..... | 2 | .. |
| Kentucky, Polytechnic Society of..... | 1 | .. |
| Kimball, Dr. H. Augusta..... | 1 | .. |
| King, Horatio C..... | .. | 3 |
| Koztowski, W. M..... | .. | 1 |
| Lake Forest (Ill.) University..... | 1 | .. |
| Lake Mohawk Conference..... | .. | 1 |
| Lancaster (Mass.) Town Library..... | .. | 1 |
| Landmesser, John..... | 5 | .. |

| | VOLS. | PAMP. |
|---|-------|-------|
| Lawrence (Mass.), Public Library..... | .. | 4 |
| Lee, Alexander Y., 3 maps..... | 1 | .. |
| Lee, Elmer, M. D..... | .. | 1 |
| Lee, F. G..... | 1 | .. |
| Leeds (Eng.), Public Free Library..... | .. | 1 |
| Leland Stanford, Jr., University..... | 2 | 4 |
| Leominster (Mass.), Library Committee..... | .. | 1 |
| Lincoln (Eng.), Public Library..... | .. | 1 |
| Little, Brown & Company..... | .. | 1 |
| Liverpool, Public Libraries..... | .. | 2 |
| London, School of Economics and Political Science..... | .. | 1 |
| Lowell (Mass.), City Library..... | .. | 7 |
| Lull, Newton..... | 1 | .. |
| Lynn (Mass.), Public Library..... | .. | 1 |
| McClurg, A. C., & Company..... | 1 | .. |
| McCormick, Cyrus H..... | 1 | .. |
| McKeighan, Robert..... | .. | 2 |
| Macmillan Company..... | 4 | .. |
| Maine, 1st Cavalry Association..... | .. | 1 |
| Malden (Mass.), Public Library..... | .. | 1 |
| Manchester (Eng.), Literary and Philosophical Society... .. | .. | 4 |
| Manchester (Eng.), Public Free Libraries Committee..... | .. | 1 |
| Manchester (N. H.), City Library..... | .. | 1 |
| Massachusetts, State Board of Lunacy and Charity..... | 1 | .. |
| Massachusetts Commonwealth, Secretary of..... | 4 | .. |
| Massachusetts Institute of Technology..... | 1 | 2 |
| Michigan, Bureau of Labor and Industrial Statistics..... | 1 | .. |
| Michigan, State Board of Agriculture..... | 1 | .. |
| Michigan, State Library..... | 2 | .. |
| Michigan, University of..... | 1 | 1 |
| Michigan Mining School..... | .. | 1 |
| Mills, William S..... | 1 | .. |
| Milwaukee, Parkman Club..... | .. | 12 |
| Milwaukee, Public Library..... | 1 | 6 |
| Minneapolis, Public Library..... | .. | 4 |
| Minnesota Historical Society..... | 2 | 3 |
| Missouri Botanical Garden..... | 1 | 1 |
| Missouri Geological Survey..... | 1 | .. |
| Montana, Bureau of Agriculture..... | 1 | .. |
| Morawski, Miss Lilyan G..... | 2 | .. |
| Moreland (Ill.), Presbyterian Junior Christian Endeavor Society..... | 1 | .. |

| | VOLS. | PAMP. |
|---|-------|-------|
| Morrell, Charles..... | 3 | .. |
| Morris, Seymour..... | 1 | .. |
| Mount Holyoke College..... | .. | 1 |
| Munson, Myron A..... | .. | 2 |
| National Democratic Committee..... | 3 | 1 |
| Nebraska, University of..... | .. | 1 |
| New Bedford (Mass.), Free Public Library..... | .. | 4 |
| New Church Temperance Society..... | .. | 5 |
| New England Historic Genealogical Society..... | 1 | .. |
| New England Mutual Life Insurance Company..... | .. | 1 |
| New Hampshire, Bureau of Labor..... | 1 | .. |
| New Hampshire State Library..... | 4 | .. |
| New Haven (Conn.), Free Public Library..... | .. | 6 |
| New South Wales, Department of Public Works..... | 1 | .. |
| New York (City), Board of Education..... | 1 | .. |
| New York (City), Free Circulating Library..... | .. | 1 |
| New York (City), General Society of Mechanics and Tradesmen..... | .. | 2 |
| New York (City), Harlem Library..... | .. | 2 |
| New York (City), Mercantile Library Association..... | .. | 2 |
| New York (City), Public Library..... | .. | 2 |
| New York (City), Union Theological Seminary..... | .. | 1 |
| New York (State), Meteorological Observatory..... | 1 | 1 |
| New York (State), Library..... | 61 | 2 |
| Newark (N. J.), Free Public Library..... | .. | 9 |
| Newburyport (Mass.), Public Library..... | .. | 1 |
| Nitchie, J. H..... | 1 | .. |
| Noble, F. H., & Company..... | 1 | .. |
| Nörrenberg, Dr. C..... | .. | 2 |
| North Adams (Mass.), Public Library..... | .. | 2 |
| North Carolina, Bureau of Labor Statistics..... | 2 | .. |
| Northwestern University..... | 1 | 2 |
| Nyhuus, Haakon..... | .. | 1 |
| Ohio, Bureau of Labor Statistics..... | 1 | .. |
| Ohio, Sons of the Revolution..... | 1 | .. |
| Ohio State Library..... | .. | 1 |
| Open Court Publishing Company..... | 1 | 1 |
| Orr, William, Jr..... | .. | 1 |
| Ottofy, Lewis, D. D. S..... | 1 | .. |
| Owen-Thompson Electric Company..... | .. | 1 |
| Pacific Northwest Immigration Board..... | 3 | .. |
| Paris, Bibliothèque Nationale..... | 1 | .. |

| | VOLS. | PAMP. |
|--|-------|-------|
| Parker, M. C..... | 3 | .. |
| Parsons, J. Russell..... | 1 | .. |
| Paterson (N. J.), Free Public Library..... | .. | 4 |
| Peabody Institute, Baltimore..... | 1 | 1 |
| Peabody Institute, Danvers, Mass..... | .. | 1 |
| Pennsylvania, University of..... | 1 | 3 |
| Peoria (Ill.), Public Library..... | .. | 1 |
| Philadelphia, Academy of Sciences..... | .. | 1 |
| Philadelphia, Apprentices' Library Company..... | .. | 1 |
| Philadelphia, Christ Church Historical Association..... | 1 | .. |
| Philadelphia, Drexel Institute..... | 2 | 1 |
| Philadelphia, Free Library..... | .. | 1 |
| Philadelphia, Friends' Book Association..... | 1 | 2 |
| Philadelphia, Hospital..... | 1 | .. |
| Philadelphia, Mercantile Library Company..... | .. | 8 |
| Plymouth (Mass.), Free Public Library..... | .. | 1 |
| Portland (Me.), Public Library..... | .. | 1 |
| Portland (Ore.), Library Association..... | .. | 5 |
| Prince, C. Leeson..... | .. | 1 |
| Princeton University..... | 1 | .. |
| Providence (R. I.), Athenæum..... | .. | 2 |
| Providence (R. I.), Public Library..... | .. | 3 |
| Purdue University..... | 1 | .. |
| Putnam, Prof. Frederick W..... | .. | 12 |
| Ranck, George W..... | 1 | .. |
| Raynolds, L. D..... | 1 | .. |
| Raynolds, W. L..... | 2 | 1 |
| Redwood Library and Athenæum, Newport, R. I..... | .. | 1 |
| Reilly, F. W..... | .. | 1 |
| Republican National Committee..... | 8 | .. |
| Reynolds Library, Rochester, N. Y..... | .. | 1 |
| Rhode Island, Commissioner of Industrial Statistics..... | 1 | .. |
| Richmond (Eng.) Public Library Committee..... | .. | 1 |
| Roberts, John T..... | .. | 1 |
| Rochester (N. Y.), University of..... | .. | 1 |
| Rose Polytechnic Institute, Terre Haute, Ind..... | .. | 1 |
| Rosenthal, Hon. Julius..... | 2 | 1 |
| Rosi, Candido..... | 2 | .. |
| Royal Astronomical Society..... | 1 | .. |
| Royal Historical Society..... | 1 | .. |
| Royal Scottish Society of Arts..... | .. | 2 |
| Rühle, Otto..... | .. | 5 |

| | VOLS. | PAMP. |
|---|-------|-------|
| Russell, John A..... | 1 | .. |
| St. Ignatius College, Chicago..... | 1 | .. |
| St. Joseph (Mo.), Free Public Library..... | .. | 1 |
| St. Louis, Academy of Science..... | .. | 9 |
| St. Louis, Mercantile Library Association..... | .. | 1 |
| St. Louis, Public Free Library..... | .. | 1 |
| St. Paul, Public Library..... | .. | 1 |
| Salem (Mass.), Public Library..... | 1 | 9 |
| Salter, William M..... | 3 | 13 |
| San Francisco, Free Public Library..... | .. | 7 |
| San Francisco, Mechanics' Institute..... | .. | 1 |
| San Francisco, Mercantile Library Association..... | .. | 1 |
| Scranton (Pa.), Public Library..... | .. | 3 |
| Seattle, Library Commission..... | .. | 1 |
| See, Dr. F. J. J..... | 1 | .. |
| Sellers, Edwin J..... | .. | 1 |
| Sheffield (Eng.) Free Public Libraries..... | .. | 1 |
| Shortall, John G..... | 1 | .. |
| Sioux City (Iowa), U. S. Engineer Office, 2 pkgs..... | .. | 1 |
| Smith, Gen. John C..... | .. | 1 |
| Smithsonian Institution..... | 17 | 7 |
| Society of Naval Architects and Marine Engineers..... | .. | 1 |
| Somerville (Mass.) Public Library..... | .. | 1 |
| Sound Currency Commission..... | .. | 2 |
| South Dakota, U. S. Experiment Station..... | .. | 7 |
| Southbridge (Mass.), Public Library..... | .. | 1 |
| Southern Historical Society..... | 1 | .. |
| Spectator Company..... | 1 | .. |
| Springfield (Mass.), City Library Association..... | .. | 1 |
| Springfield (Ohio), Public Library..... | .. | 1 |
| Stirling's and Glasgow Public Library..... | .. | 1 |
| Stockholm, Kongl. Biblioteket..... | 14 | .. |
| Stokes, Anson Phelps..... | 1 | .. |
| Summerfield, Mrs. E. C..... | 10 | 1 |
| Sundell, Edward..... | 1 | .. |
| Swift, Hon. George B..... | .. | 2 |
| Swords, Henry C..... | 1 | .. |
| Syracuse (N. Y.), Central Library..... | .. | 1 |
| Taunton (Mass.), Public Library..... | .. | 2 |
| Thomas, G. W..... | 10 | 3 |
| Tiffany Glass & Decorating Company..... | 2 | .. |
| Toronto Public Library..... | .. | 1 |

| | VOLS. | PAMP. |
|--|-------|-------|
| Trinity College, Hartford, Conn..... | .. | 1 |
| Truman, Joseph M..... | .. | 79 |
| Tucker, Willis G., M. D..... | .. | 2 |
| Tufts College..... | .. | 2 |
| Tulane University of Louisiana..... | .. | 1 |
| United States, Bureau of American Republics..... | 3 | 9 |
| United States, Bureau of Education..... | 8 | 3 |
| United States, Bureau of Navigation..... | 9 | .. |
| United States, Bureau of Statistics..... | 1 | 12 |
| United States, Census Office..... | 1 | .. |
| United States, Civil Service Commission..... | .. | 4 |
| United States, Coast and Geodetic Survey..... | 2 | 1 |
| United States, Commissioner of Fish and Fisheries..... | 4 | .. |
| United States, Comptroller of the Currency..... | 2 | .. |
| United States, Department of Agriculture..... | 3 | 41 |
| United States, Department of Labor..... | 4 | 7 |
| United States, Department of State..... | 4 | 1 |
| United States, Department of the Interior..... | 13 | 32 |
| United States, Department of the Navy..... | 1 | .. |
| United States, Department of the Treasury..... | 2 | 8 |
| United States, Director of the Mint..... | 11 | .. |
| United States, Geological Survey, 1 pkge..... | 5 | 10 |
| United States, Government Printing Office..... | 102 | 81 |
| United States, Interstate Commerce Commission..... | 2 | 2 |
| United States, Life Saving Service..... | 1 | .. |
| United States, Nautical Almanac Office..... | 1 | 1 |
| United States, Naval Observatory..... | 1 | .. |
| United States, Patent Office..... | 49 | .. |
| United States, War Department..... | 5 | 4 |
| United States, Weather Bureau, 11 pkgs..... | 1 | 11 |
| Unknown..... | 13 | 5 |
| Uruguay, Bureau d'Echanges Internationaux, Montevideo..... | 1 | 1 |
| Van Nest, G. W..... | .. | 1 |
| Vandecook, J. D..... | 1 | .. |
| Vermont, University of..... | .. | 1 |
| Vermont State Library..... | 20 | 13 |
| Vickers, Robert H..... | 2 | .. |
| Victoria (Australia), Public Library, Museum and National Gallery..... | 1 | 2 |
| Wade, Stuart C..... | 5 | .. |
| Walker, Albert H..... | 1 | .. |

| | VOLS. | PAMP. |
|---|-------|-------|
| Walton, Joseph..... | .. | 2 |
| Warren County Library and Reading Room Association, Monmouth, Ill..... | .. | 2 |
| Washburne, Hon. Hempstead..... | 3 | 36 |
| Washington (D. C.), Philosophical Society..... | 1 | .. |
| Watertown (Mass.), Free Public Library | .. | 1 |
| Wayne Publishing Company | 1 | .. |
| Werner Company..... | .. | 1 |
| Western Reserve Historical Society..... | .. | 1 |
| Weydert, Nicolas E..... | 3 | 1 |
| Whitehouse, Fitzhugh..... | 1 | .. |
| Wickersham, W. B..... | .. | 7 |
| Wiebking, A..... | 2 | .. |
| Willard, Dr. Samuel..... | 1 | .. |
| William and Mary, College of..... | .. | 1 |
| Wilmington (Del.), Institute..... | .. | 3 |
| Winsor, Justin..... | .. | 3 |
| Wisconsin, Bureau of Labor and Industrial Statistics.... | 1 | .. |
| Wisconsin State Treasury Department..... | 1 | .. |
| Wisconsin, University of..... | .. | 8 |
| Wisconsin State Historical Society..... | .. | 1 |
| Wisconsin State Library Commission..... | 1 | 1 |
| Woburn (Mass.), Public Library..... | .. | 2 |
| Woman's Relief Corps..... | 8 | .. |
| Worcester (Mass.), Free Public Library..... | 1 | 1 |
| Yale University..... | 1 | 4 |
| Yearly Meeting of Friends..... | .. | 1 |
| Young, Miss Elizabeth A..... | 1 | .. |
| Young Men's Christian Association of North America.... | 1 | .. |
| Zürich, Stadtbibliothek..... | .. | 1 |
| Zwiazku Mlodziezy w Americe..... | 2 | .. |

APPENDIX D.

SERIALS DONATED.

American Publications.

- | | |
|-----------------------------------|--|
| Advocate of Peace. | Cook's Excursionist. |
| American. | Dental Review. |
| American Brewer's Review. | Dictation. |
| American Friend. | Earth and Man. |
| American Homes. | Elite. |
| American Jewess. | Farmer's Review. |
| American Youth. | Flaming Sword. |
| Anti-Vivisection. | Friend. |
| Argus. | Furniture Worker. |
| Banker's Monthly. | Gentleman Farmer. |
| Bearings. | Great Round World. |
| Bureau of the American Republics, | Hartford Seminary Record. |
| Monthly Bulletin of. | Housekeeper. |
| Canada Patent Office Record. | Industrial World. |
| Case and Comment. | Inland Architect. |
| Catholic University Bulletin. | International Good Templar. |
| Cause. | Inventive Age. |
| Cherry Circle. | Jewelers' Weekly. |
| Chicago, Council Proceedings. | Johns Hopkins University Circu- lars. |
| Chicago Law Journal. | Journal of Hygeio-Therapy. |
| Chicago Legal News. | Journal of Zoöphily. |
| Chicago Vegetarian. | Kansas University Quarterly. |
| China, Glass and Lamps. | Lumber Trade Journal. |
| Clinique. | Manifesto. |
| Colliery Engineer. | Manufacturer. |
| Colorado School Journal. | Manufacturers' Record. |
| Congressional Record. | Mind and Body. |
| Consular Reports. | Mining and Scientific Press. |
| | Mining Industry and Review. |

Missionary Herald.
 Modern Machinery.
 Monthly Weather Review.
 Munson Phonographic News.
 Musical Age.
 National Bimetallist.
 National Bottler's Gazette.
 National Printer-Journalist.
 National Single Taxer.
 New Earth.
 North Shore Suburban.
 Northwest Magazine.
 Official Gazette United States Pat-
 ents.
 Open Court.
 Osteopath.
 Pacific Health Journal.
 Painting and Decorating.
 Pernin's Monthly Stenographer.
 Pigeon Fancy.
 Presto.
 Printers' Ink.
 Public Health Reports.
 Referee.
 Review.
 Sanitary District of Chicago.
 Sanitary Era.
 Shorthand Educator.
 Signs of the Times.
 Stationary Engineer.
 Stationer and Printer.
 Street Railway Review.
 Tennessee University Magazine.
 Textile World.
 Twentieth Century.
 Western Agriculturist.

British Publications.

Free Russia.
 Herald of Peace.
 Homœopathic Review.
 Ironmonger.
 Phonetic Journal.

Positivist Review.
 Royal Astronomical Society,
 Monthly Notices of.

German Publications.

Hochschul-Nachrichten.
 Welt-Blatt.

Bohemian Publication.

Svetem.

Danish Publication.

Arbeideren.

Armenian Publications.

Armenia.
 Hentchak.

American Newspapers.

DAILY.

Boston—Herald.
 Chicago—Chronicle.
 Memphis—Commercial-Appeal.
 Saginaw (Mich.)—Evening News.
 St. Joseph—Herald.
 Spokane—Spokesman-Review.
 Superior (Wis.)—Evening Tele-
 gram.
 Leader.

WEEKLY, BI-WEEKLY AND MONTHLY.

Antioch (Ill.)—News.
 Battle Creek (Mich.) — Advent
 Review.
 Boston—Christian Register.
 World's Crisis.
 Chicago—American Soap Journal.
 Banner.
 Eagle.
 Epworth Herald.
 Home Visitor.
 Israelite.

Chicago—Jewish Courier.

Mission Studies.

New World.

Parish Messenger.

Saturday Evening Herald.

Standard.

Union Signal.

West Side Vindicator.

Western British American.

Western Catholic News.

Young Crusader.

Cleveland—Citizen.

Gainesville (Fla.)—Weekly Sun.

Hartford (Conn.)—Traveler's
Record.

Lancaster (N. Y.)—Enterprise.

Los Angeles (Cal.)—Land of Sun-
shine.

Minneapolis—Progress.

New York—Hebrew Standard.
People.

Orlando (Fla.)—Reporter.

Philadelphia—Indian's Friend.

Plainfield (N. J.)—Sabbath Re-
corder.

Portland—Pacific Farmer.

San Diego (Cal.)—Advertiser.

Tennessee City—Coming Nation.

Washington—Postal Record.
Sentinel.

Canadian Newspapers.

DAILY.

Montreal—Daily Witness.

German Newspapers.

DAILY.

Chicago—Abendpost.

Arbeiter-Zeitung.

Freie Presse.

Staats-Zeitung.

St. Louis—Amerika.

WEEKLY.

Chicago—Amerikanische - Turn-
zeitung.

Deutsche Warte.

Deutscher Courier.

Katholischer Jugendfreund.

Katholisches Sonntagsblatt.

Der Sternewirth.

Columbus (Ohio)—Waisenfreund.

Los Angeles (Cal.)—Germania.

Süd-California Post.

Medford (Wis.)—Waldbote.

New York—Sonntagsblatt der N.
Y. Volkszeitung.

San Francisco—Tageblatt.

Sheboygan (Wis.)—Volksblatt.

French Newspapers.

DAILY.

Paris—Le Journal.

WEEKLY.

Chicago—Courrier de l'Ouest.

Los Angeles (Cal.)—L'Union Nou-
velle.

Bohemian Newspapers.

DAILY.

Chicago—Denni Hlasatel.

Milwaukee—Volnost.

WEEKLY.

Cedar Rapids (Iowa)—Svit.

Chicago—Cmuchalet.

Duch Casu.

Kewaunee (Wis.) — Kewaunské
Listy.

New York—Jednota.

Sokol Americky.

Omaha.—Knihovna Americka.

Pokrok Zapadu.

Racine (Wis.)—Slavie.

Wilber (Neb.)—Pritel Lidu.

Polish Newspapers.

DAILY.

Milwaukee—Kuryer Polski.

WEEKLY.

Buffalo—Echo.

Polak w Ameryce.

Chicago—Dzienswiety.

Gazetta Katolicka.

Narod Polski.

Nowa Zycie.

Sztandar.

Zgoda.

Detroit—Niedziela.

Milwaukee—Katolik.

Scranton (Pa.)—Przegląd.

Dutch Newspapers.

WEEKLY.

Chicago—De Nederlander.

Kalamazoo (Mich.)—Hollandsche
Amerikaan.**Norwegian and Danish News-
papers.**

DAILY.

Chicago—Skandinaven.

WEEKLY AND MONTHLY.

Chicago—Amerika.

Folkets Avis.

Folkevennen.

Norden.

Posten.

Revyen.

Skandinaven.

Ugebladet.

Verdens Gang.

Duluth—Scandia.

Minneapolis—Nye Normanden

Omaha—Danske Pioneer.

St. Paul—Nordvesten.

Superior (Wis.)—Tidende.

Swedish Newspapers.

WEEKLY.

Chicago—Bladet.

Fosterlandet.

Gamla och Nya Hemlandet.

Missions-Wännen.

Svenska Amerikanaren.

Svenska Kuriren.

Svenska Tribunen.

Escanaba (Mich.)—Medborgaren

Italian Newspapers.

WEEKLY.

Chicago—L'America.

L'Italia.

Croatian Newspapers.

WEEKLY.

Chicago—Chicago.

Lithuanian Newspaper.

WEEKLY.

Chicago—Lietuva.

Hawaiian Islands.

MONTHLY.

Honolulu—Paradise of the Pacific.

Mexican Newspaper.

DAILY.

Mexico—Two Republics.

Section VIII.

PUBLIC SCHOOLS

OF THE

CITY OF CHICAGO.

FORTY-THIRD ANNUAL REPORT

OF THE

BOARD OF EDUCATION

FOR THE

YEAR ENDING JUNE 25, 1897.

CHICAGO:

JOHN F. HIGGINS PRINT,



196-198 CLARK STREET.

1897.

BOARD OF EDUCATION

For the Year 1896-7.

EDWARD G. HALLE, *President.* *

THOMAS CUSACK, *Vice-President.*

W. A. S. GRAHAM, *Secretary.*

| NAME. | ADDRESS. | TERM EXPIRES. |
|--|-----------|------------------|
| THOMAS BREMAN, 16 Reaper Block, Clark and Washington Streets., | - | 1899 |
| DANIEL R. CAMERON, 73 Lake Street, | - - - - - | 1899 |
| THOMAS CUSACK, 500 Throop Street, | - - - - - | 1898 |
| EDWARD G. HALLE, Room 204, Royal Insurance Building, | - - | 1899 |
| *FRED M. BLOUNT, Chicago National Bank, | - - - - - | 1897 |
| JOHN S. MILLER, Room 916, Monadnock Building, | - - - - - | 1897 |
| JOSEPH W. ERRANT, Room 1537, Unity Building, | - - - - - | 1897 |
| †WALLACE F. KIRK, 33-35 Ontario Street, | - - - - - | 1897 |
| †BENJAMIN J. ROSENTHAL, 152 State Street, | - - - - - | 1897 |
| LOUIS O. KOHTZ, 172 La Salle Street, | - - - - - | 1897 |
| ALFRED S. TRUDE, Room 15, 79 Clark Street, | - - - - - | 1898 |
| WILLIAM R. HARPER, Fifty-eighth Street and Ellis Avenue, | - - | 1898 |
| OTTO C. SCHNEIDER, 392 North Clark Street, | - - - - - | 1898 |
| P. F. PETTIBONE, 48 Jackson Street, | - - - - - | 1898 |
| MRS. ELLA G. HULL, 3221 South Park Avenue, | - - - - - | 1898 |
| MRS. EVELYN A. FRAKE, 625 Fulton Street, | - - - - - | 1898 |
| JOSEPH H. STRONG, Room 26, 115 Monroe Street, | - - - - - | 1899 |
| GEORGE E. ADAMS, Room 914, Temple Building, | - - - - - | 1899 |
| CLAYTON MARK, Twenty-sixth Street and Blue Island Avenue, | - - | 1899 |
| H. H. GROSS, Room 1220, Chamber of Commerce, | - - - - - | 1899 |
| OSCAR M. TORRISON, Room 54, 164 La Salle Street, | - - - - - | 1897 |

*Mr. Blount resigned February 8, and was succeeded by Mr. John F. Wolff.

†Resigned and successors did not qualify.

STANDING COMMITTEES 1896-7.

SCHOOL MANAGEMENT.

Messrs. Brennan, Cusack, Errant, Kohtz, Mrs. Hull, Messrs. Strong, Adams, Harper, Cameron, Rosenthal and Mrs. Frake.

JANITORS AND SUPPLIES.

Messrs. Cameron, Schneider, Trude, Pettibone and Mark.

BUILDINGS AND GROUNDS.

Messrs. Cusack, Kohtz, Kirk, Mark, Blount, Schneider, Gross, Pettibone and Torrison.

FINANCE.

Messrs. Blount, Gross and Mark.

JUDICIARY.

Messrs. Adams, Rosenthal and Torrison.

SCHOOL FUND PROPERTY.

Messrs. Miller, Brennan, Trude, Blount, Cusack, Errant and Kohtz.

HIGH SCHOOLS.

Messrs. Trude, Brennan, Errant, Pettibone, Strong, Cusack and Harper.

MANUAL TRAINING.

Messrs. Kohtz, Kirk, Miller, Mark and Mrs. Hull.

SPECIAL FUNDS.

Mrs. Frake, Messrs. Rosenthal, Cameron, Kirk and Miller.

DRAWING AND PENMANSHIP.

Messrs. Pettibone, Miller, Kirk, Gross and Torrison.

MUSIC.

Mr. Strong, Mrs. Frake, Messrs. Gross, Adams, Mark and Mrs. Hull.

GERMAN.

Messrs. Schneider, Kohtz, Adams, Strong and Mrs. Hull.

PHYSICAL CULTURE.

Messrs. Gross, Schneider, Kohtz, Mark and Rosenthal.

COMPULSORY EDUCATION.

Mrs. Hull, Messrs. Blount, Trude, Brennan and Mrs. Frake.

NORMAL SCHOOL.

Messrs. Errant, Harper, Mrs. Frake, Messrs. Cameron and Pettibone.

REFORM AND RETRENCHMENT.

Messrs. Cusack, Kohtz, Cameron, Strong and Errant.

RULES.

Messrs. Errant, Pettibone, Rosenthal, Gross and Torrison.

NOTE.—When Mr. Blount resigned, his successor, Mr. Wolff succeeded him on the committees, with the exception of the Committee on School Fund Property. Mr. Mark was added to the Committee on School Fund Property

SUPERINTENDENTS, SUPERVISORS AND OFFICE EMPLOYES, 1896-7.

| | | | | | | | |
|--------------------------|--|----------------------------------|----------------------------------|---------------------------------------|---------------------------------------|---|--------------------------------|
| ALBERT G. LANE, | - | - | - | - | - | - | Superintendent of Schools |
| AUGUSTUS F. NIGHTINGALE, | Ass't Superintendent of Schools, | High Schools | | | | | |
| ALFRED KIRK, | - | - | - | Ass't Superintendent of Schools, | Dist. No. 1 | | |
| WILLIAM W. SPEER, | - | - | Ass't Superintendent of Schools, | Dist. No. 2 | | | |
| EDWARD C. DELANO, | - | Ass't Superintendent of Schools, | Dist. No. 3 | | | | |
| ALBERT R. SABIN, | - | - | Ass't Superintendent of Schools, | Dist. No. 4 | | | |
| JAMES HANNAN, | - | - | Ass't Superintendent of Schools, | Dist. No. 5 | | | |
| LESLIE LEWIS, | - | - | - | Ass't Superintendent of Schools, | Dist. No. 6 | | |
| ELLA F. YOUNG, | - | - | - | Ass't Superintendent of Schools, | Dist. No. 7 | | |
| GUSTAV A. ZIMMERMANN, | - | - | - | Supervisor of Modern Languages | | | |
| THEODORE J. BLUTHARDT, | Supervisor of Compulsory Education and | | | | | | |
| Sanitary Inspector | | | | | | | |
| GABRIEL KATZENBERGER, | - | - | - | Supervisor of Singing, High Schools | | | |
| ORLANDO BLACKMAN, | - | - | - | Supervisor of Singing, Grammar Grades | | | |
| AGNES COX, | - | - | - | - | Supervisor of Singing, Primary Grades | | |
| HERMAN HANSTEIN, | - | - | - | Supervisor of Drawing, High Schools | | | |
| JOSEPHINE C. LOCKE, | Supervisor of Drawing, Grammar and Primary | | | | | | |
| Schools | | | | | | | |
| HENRY SUDER, | - | - | - | - | - | - | Supervisor of Physical Culture |
| DONALD L. MORRILL, | - | - | - | - | - | - | - |
| W. A. S. GRAHAM, | - | - | - | - | - | - | Clerk of the Board |
| JOHN A. GUILFORD, | - | - | - | - | - | - | Business Manager |
| THOMAS J. WATERS, | - | - | - | - | - | - | Chief Engineer |
| GEORGE G. CUSTER, | - | - | - | - | - | - | - |
| JOHN W. FOSTER, | - | - | - | - | - | - | Supervisor of Supplies |
| NORMAND S. PATTON, | - | - | - | - | - | - | - |
| C. N. FESSENDEN, | - | - | - | - | - | - | - |
| FRED VOGT, | - | - | - | - | - | - | - |

COMMITTEES ON SCHOOLS, 1896-7.

CHICAGO NORMAL SCHOOL.

MESSRS. JOSEPH W. ERRANT, WILLIAM R. HARPER, MRS. EVELYN A. FRAKE, MESSRS. D. R. CAMERON AND P. F. PETTIBONE.

HIGH SCHOOLS.

MESSRS. ALFRED S. TRUDE, THOMAS BRENNAN, JOSEPH W. ERRANT, P. F. PETTIBONE, JOSEPH H. STRONG, THOMAS CUSACK AND WILLIAM R. HARPER.

Assistant Superintendent in Charge, A. F. NIGHTINGALE.

ENGLISH HIGH AND MANUAL TRAINING SCHOOL.

MESSRS. LOUIS O. KOHTZ, WALLACE F. KIRK, JOHN S. MILLER, CLAYTON MARK AND MRS. EVELYN A. FRAKE.

Assistant Superintendent in Charge, A. F. NIGHTINGALE.

DISTRICT No. 1.

(That part of North Division north of North Avenue and that part of West Division north of Belmont Avenue.)

MESSRS. LOUIS O. KOHTZ, WALLACE F. KIRK AND GEORGE E. ADAMS.

| | | |
|----------------------|--------------------|---------------|
| Agassiz, | Greeley, | Morris, |
| Alcott, | Hamilton, | Mulligan, |
| Arnold, | Hawthorne, | Newberry, |
| Audubon, | Headley, | Ogden, |
| Augustus H. Burley, | Knickerbocker, | Prescott, |
| Belle Plaine Avenue, | La Salle, | Ravenswood, |
| Blaine, | Lincoln, | Rogers Park, |
| Bowmanville, | Louis Nettelhorst, | Rose Hill, |
| Franklin, | Lyman Trumbull, | Sheldon, |
| George H. Thomas, | McPherson, | Thomas Hoyne, |
| George Schneider, | Manierre, | W. C. Goudy. |

DISTRICT No. 2.

That part of North Division south of North Avenue, and that part of West Division between Chicago Avenue and Belmont Avenue, and east of the Chicago, Milwaukee & St. Paul Railway.)

MESSRS. EDWARD G. HALLÉ, OTTO C. SCHNEIDER AND OSCAR M. TORRISON.

| | | |
|----------------|-----------------|---------------|
| Adams, | Huron Street, | Motley, |
| Andersen, | Irving Park, | Norwood Park, |
| Avondale, | Jefferson Park, | Oak Street, |
| Bancroft, | Kinzie, | Peabody, |
| Bernhard Moos, | Kosciusko, | Pulaski, |
| Brentano, | La Fayette, | Schiller, |
| Burr, | Langland, | Talcott, |
| Chase, | Linne, | Von Humboldt, |
| Drummond, | Logan, | Washington, |
| Goethe, | Montefiore, | Wicker Park. |

DISTRICT No. 3.

(That part of the West Division between Chicago Avenue and Polk Street.)

MESSRS. D. R. CAMERON, FRED M. BLOUNT AND CLAYTON MARK.

| | | |
|-----------------|-----------------|-----------------|
| Armour Street, | Emerson, | Marshall, |
| Bismarck, | Grant, | Richard Yates, |
| Boulevard, | Hayes, | Ryerson, |
| Brown, | Henry H. Nash | Scammon, |
| Calhoun, | Irving, | Skinner, |
| Carpenter, | John Ericsson, | Sumner, |
| Central Park, | John McLaren, | Tennyson, |
| Columbus, | King, | Tilden, |
| Dore, | Lowell, | Tilton, |
| D. R. Cameron, | Madison Street, | Wells, |
| Ellen Mitchell, | Marquette, | Wm. Penn Nixon. |

DISTRICT No. 4.

(That part of the West Division south of Polk Street.)

MESSRS. THOMAS CUSACK, ALFRED S. TRUDE AND P. F. PETTIBONE.

| | | |
|---------------------|--------------------|-----------|
| Andrew Jackson, | Clarke, | Farragut, |
| Blue Island Avenue, | Cooper, | Foster, |
| Brainard, | David Swing, | Froebel, |
| Bryant, | Eighteenth Street, | Garfield, |

| | | |
|-----------------|--------------|---------------------|
| George Howland, | Komensky, | Thomas J. Chalmers, |
| Gladstone, | Lawndale, | Throop, |
| Goodrich, | Longfellow, | Victor F. Lawson, |
| Hammond, | Medill, | Walsh, |
| Jefferson, | Pickard, | Washburne, |
| John Crerar, | Polk Street, | Whittier, |
| John M. Smyth | Rogers, | Worthy. |

DISTRICT No. 5.

(That part of the South Division west of the Chicago, Rock Island & Pacific Railroad and north of Fifty-first Street.)

MRS. EVELYN A. FRAKE, MESSRS. JOSEPH H. STRONG AND H. H. GROSS.

| | | |
|-------------------------|-----------------|---------------|
| Alice L. Barnard, | Everett, | Holmes, |
| Beale, | Fulton, | Kershaw, |
| Brenan, | Graham, | McAllister, |
| Brighton, | Greene, | O'Toole, |
| Buckley, | Hancock, | Parkman, |
| Burroughs, | Hedges, | Perkins Bass, |
| Chas. Warrington Earle, | Hendricks, | Seward, |
| Chicago Lawn, | Hermann Raster, | Sherman, |
| Colman, | Hoerner, | Shields. |
| D. S. Wentworth, | Holden, | |

DISTRICT No. 6.

(That part of the South Division south of Fifty-first Street and west of the Illinois Central Railroad.)

MESSRS. JOHN S. MILLER, JOSEPH W. ERRANT AND WILLIAM R. HARPER.

| | | |
|-------------------|-----------------|------------------|
| Auburn Park, | Hartigan, | Normal Practice, |
| Brownell, | Harvard, | Park Manor, |
| Burnside, | Healy, | Ray, |
| Carter, | Horace Mann, | Scanlan, |
| Cornell, | James W. Scott, | Sherwood, |
| Ellis Avenue, | Kenwood, | Van Vliissingen, |
| Fallon, | Lewis, | Ward, |
| Fernwood, | McClellan, | West Pullman, |
| George W. Curtis, | McCosh, | Woodlawn, |
| Gresham, | Mark Sheridan, | Yale. |
| Harrison, | | |

DISTRICT No. 7.

(That part of the South Division east of the Chicago, Rock Island & Pacific Railroad north of Fifty-first Street, and that part of the South Division east of the Illinois Central Railroad.)

MESSRS. THOMAS BRENNAN, B. J. ROSENTHAL AND MRS. ELLA G. HULL.

| | | |
|-------------------|-----------------------|----------------------|
| Bowen, | J. N. Thorp, | Parkside, |
| Calumet Avenue, | J. R. Doolittle, Jr., | Phil. Sheridan, |
| Cummings, | Jones, | Pullman, |
| Douglas, | Keith, | Raymond, |
| Farren, | Madison Avenue, | Riverdale, |
| Forestville, | Melville W. Fuller, | Springer, |
| Gallistel, | Moseley, | Stony Island Avenue, |
| Greenwood Avenue, | Myra Bradwell, | Taylor, |
| Haven, | Oakland, | Walter Scott, |
| Henry Clay, | Oak Ridge, | Webster. |
| J. L. Marsh, | | |

REPORT OF THE PRESIDENT.

REPORT OF THE PRESIDENT.

To the Board of Education of the City of Chicago:

It is a very great pleasure for me at the close of the school year to review the work of the educational department of our city government, to felicitate the people of Chicago upon the efforts of the Board of Education, and incidentally to express my own appreciation of the distinguished honor accorded me in being called upon to preside over your deliberations—a mark of esteem worthy a lifetime of conscientious, persistent effort to attain. It has been truly said by a gracious resident of Chicago that the laughter of a child is the sweetest music heard in the terrestrial or celestial spheres. It follows that those who are striving to ennoble childhood, prepare youth for the glories and trials of maturity, and are generating currents calculated to electrify the reasoning faculties, find infinite satisfaction in what is now in progress looking to the advancement of the science of pedagogy.

Menticulture and its environment have unsurpassed attractions for those, aside from the student, who are brought in contact with children, and I have the conviction that the results achieved simply presage greater successes in the near future. Only the landscape gardener can fittingly array the

beauties of nature. His skillful hand brings the richest tones to blooming springtime, the blossoms of summer in greatest profusion from earth formerly unadorned, and so it is our teachers have found treasures in child-nature requiring only their magic touch to cause that intellectual awakening destined to effect a higher standard of citizenship and promote a more comprehensive recognition of the responsibility resting upon the individual. Education is the Orpheus "whose lyre lays its charm" on all, and our teachers are now more perfect in their understanding of the dignity of their profession, that they share with the mothers of our country the guardianship of our national honor and welfare. Therefore, with our business offices conducted in a manner removed from the possibility of criticism, so that none of the moneys set aside by a generous people are misdirected, I reaffirm the assurances of my predecessors in the presidency, that the affairs of the Board of Education are being economically and admirably administered.

During my administration of the office of President and my contact with the children, I have felt of them as Pope did of us:

Men must be taught as if you taught them not,
And things unknown proposed as things forgot.

The realities of life are unfolded so quickly nowadays that we have abandoned the pedantic features of pedagogy and substituted therefor the ideals of those who first conceived the advantages of a broad democracy based upon pop-

ular education. We are altogether too practical to permit of adherence to the conceits of school life heretofore obtaining, and now when we take the child from the home we are prepared to cultivate its mental and material well-being. The child without a knowledge of nature and with a head full of conceits is a bird of picturesque plumage incapable of giving utterance to song.

Grimm tells us the oldest sanctuaries of the Germans were natural woods, and our children should find in the birth, life, death and resurrection of plants an analogy to themselves. If the heathen venerates the sun why should not our children revere earth and her products, and the orb of day, the source of all light, heat and energy? Modern pedagogy, therefore, has ceased to make the mere mastery of mathematical problems a pre-requisite in the child, but seeks rather to make the school an auxiliary to the home, as well as to the workshop, the counting room and the college where the heart, the mind and hand can operate in concert. Obliterating caste we are offering equal opportunities to all, and to do this we are providing every facility, the most skillful teachers and perfect buildings. It is to be regretted that curtailed appropriations for 1897 and 1898 embarrass us, but we have only those to blame for our shortcomings who do not comprehend our needs. If we assume the responsibility for the education of the child almost immediately after it has left the maternal knee, we must make our school buildings absolutely sanitary in all their appointments before we can

insure a sound body, without which there can be no vigorous mental growth and the consequent happiness in after life.

GROWTH OF THE YEAR.

We have, I am sorry to be compelled to confess it, almost as many children in poorly ventilated premises as we had a year ago, and this notwithstanding the prompt and intelligent expenditure of the funds apportioned for building purposes. We have striven to relieve many sections of our city so that the child of the humblest may obtain glimpses of the sunshine of school hours. We have not succeeded in meeting the demands though, because our school population is increasing so that there were enrolled at the end of the year 225,718 children, as compared with 213,825 a year ago. The average attendance for the year was 178,192, as contrasted with 165,569 in 1895-1896. We have a corps of teachers aggregating 4,914 where we had 4,668 a year ago, and if we had twenty-five more buildings we could, I am sure, fill them to overflowing within two years, and I believe the taxpayers would prefer to have the youth of our city taught in a way calculated to inspire the students with a sense of appreciation of what popular education is doing for them, rather than in makeshift surroundings.

During the school year twelve new school buildings and nine additions to old buildings have been completed, containing in the aggregate 316 class rooms, which provide for the accommodation of 17,064 pupils.

Of the twelve new buildings, eight have assembly halls.

Rooms have been fitted up for kindergartens in eight schools, and for manual training in five schools.

The Irving Park School, which was destroyed by fire, has been rebuilt with increased accommodations.

The total expenditure for school sites has been \$26,840.00 and for school buildings \$993,508.41.

The cost of the buildings completed during the year was \$1,396,082.00.

There are now under construction additions to two schools. The front part of the old manual training school, on West Monroe street, near Halsted, is being remodeled as the supply house, and the rear portion, which was destroyed by fire, is being rebuilt as the workshop of the Board.

The building of numerous additions to old schools has brought prominently to view the contrast between the buildings of twenty years ago and those of to-day. During this period there has been a great advance not only in our city but throughout the country in the quality of buildings of all classes, manifesting itself in more pleasing and varied designs, better quality and more variety in building materials, more substantial and fire-resisting construction, improved methods of heating and ventilating, and more convenient and complete internal arrangements.

In all these matters our public schools have kept pace with the general improvement in architecture. All matters affecting the health of the scholars—such as lighting, heating,

ventilating and sanitary plumbing—have received the most careful attention, so that our schools are coming to be recognized as models in these respects.

The general movement toward fireproof buildings has been recognized in the construction of school buildings in a manner to insure the safety of the pupils without incurring the expense of an absolutely fireproof construction. The boiler rooms are in all cases built outside the walls of the building and are entirely fireproof.

All plastering is applied to the surface of walls or tile partitions, without the introduction of wood furring. All ceilings are plastered on metal lath, and in the buildings now under construction all stairways are of iron.

UNIFYING SCHOOL WORK.

The correlation of our school work is proceeding in a manner designed to unite our teachers in closer sympathy, to round out the system. I again take occasion to compliment the Superintendent, his assistants and the bureau supervisors on this account, and hope they will unify the school work. Having co-operated with the home in laying the foundation, and bringing the child to realize, with Benjamin Franklin, that "truth, sincerity and integrity in dealings between men are of the utmost importance to the felicity of life," they must rear an unpretentious structure, yet make it grand enough in its design to leave its permanent impress upon mankind. What we are lacking in accommodations, we should make up in enthusiasm.

We have a high school department whose sole defects are crowded buildings and scattered branches, where perfect supervision is almost out of the question. Our policy has been to provide the greatest good for the greatest number; notwithstanding our embarrassment in having our high school students unduly restricted. The high schools, however, are maintaining their standard of excellence, and I venture the hope that ample provision will soon be made for additional buildings on the North and South Sides. In this connection, I urge upon the Board of Education the eminent propriety of establishing a high school especially devoted to the preparation of students for mercantile pursuits and for advanced manual training. The scope of our English High and Manual Training School is insufficient, although no fault is to be found with the work accomplished there. In the absence of a thorough apprentice system, we should have a complete commercial course and perfect our manual training, which leads to a comprehension of the dignity of labor. Already we have nineteen manual training shops, in which are taught five thousand five hundred seventh and eighth grade children of ninety-five schools. The number of children availing themselves of the opportunity to acquire the ability to execute with their hands what their brains dictate, is the strongest argument I can urge in favor of higher education in this direction, so that we can not only have intelligent manhood, but the influence of our schools brought directly to trade centers.

About seven years ago Mr. R. T. Crane, foreseeing the

benefits to accrue to the masses from manual training, set aside the money needed to equip an experimental elementary wood-working plant. Between three hundred and four hundred boys were enrolled. Various methods—Russian, Swedish and polyglot—were tested. From this source, and the experience of other institutions, has grown our system of manual training, and the most extravagant anticipations of Mr. Crane and the Board have been realized. We are now teaching constructive work in the seventh and eighth grades, and it may be that, later on, we can conclude to do preliminary utility work in the fifth and sixth grades. I am satisfied every member of the Board will lend co-operation to anything that will promote the self-consciousness in the child that springs from the ability to do, makes labor a pleasure and fixes the value of the work of others and the reciprocal relationships of life. In other words, I believe in the “self-activity” of Froebel. Pleasure in labor insures against idleness. Sense of capability raises the estimate of the individual and entrenches habits of concentration and perseverance. Something more than a perfunctory clerkship will not satisfy the ambitions of the child who has the ability to labor skillfully. Besides, the child whose after life by good fortune is removed from the actual producers is made more valuable to society by the manual training school experience, because the powers of others are recognized; he appreciates the value of labor’s products as well as those to whose handiwork he is indebted for his luxuries.

NECESSITY OF EXTENDED COMMERCIAL COURSE.

New York City taught us a wholesome lesson recently by establishing a commercial course calculated to equip its pupils for business pursuits. English and German are studied throughout their four-year high school course. In the second, third and fourth years French and Spanish are optional studies. All through the four years bookkeeping, business forms and business correspondence, business customs, banking and finance, commercial arithmetic and economics are also taught, and if we profit by this example we can expect to compete with continental countries in the struggle for commercial supremacy in the Latin Americas. Already we have at our doorsteps, Germany and England virtually monopolizing the trade of Mexico, Central and South America. The development of Germany's commerce is said to be directly traceable to scientific education, the small kingdom of Saxony, though an inland state, having foreign commerce of upwards of \$100,000,000 annually. So great is the faith of that country in this method of education that to the thirty commercial schools they had, ten more have been added within a very few years. Chicago should be the great distributing center of the South and Southwest, as well as the North and Northwest, but to make her so we must not only impart a thorough knowledge of our own, but of other languages and peoples. Extension of our commercial relations is imperative if we are to prosper permanently, and we must see to it, that at least intelligent competition is had with the representatives of less

enterprising countries. Foreign languages should of course be subordinated to English, but some of them are indispensable to our national growth. Goethe, the great German poet, said it was necessary to learn another language in order to understand one's own. The importance of this is further evidenced by the deep and abiding interest in the languages of the most prominent educators, who now concede them the rightful place in their discussions, and aside from the ever expanding horizon of our commercial life, the acquisition of the knowledge of German, Spanish or French is excellent mental discipline. Eliminating the element of necessity, however, setting aside the commercial value of these studies, ignoring their disciplinary advantages, the student can derive intellectual enjoyment from the study of the choice literature of these people. Only a modicum of time is needed in these studies, which do not retard the student's progress, and in return we have the enlarged view, stimulated faculties and assured mercantile success.

INSTRUCTION IN CIVICS.

In this connection I urge upon the Board of Education the propriety of increasing the instruction in civics in our schools. We have finally arrived at the conviction—although we have been tardy in reaching it—that the child is an entity and not an incident, and that “concrete instruction in civics must be increased in our schools.” When our children have ascertained their duties as related to the community, we will

have less spasmodic patriotism and more stability will be given our institutions. Our teachers must therefore lift their charges to a point of view where the magnificence of our country will evoke permanent admiration and loyalty. To this end and in the hope that the genius of our free educational system may be brought to bear on all this important work, I avail myself of the opportunity to quote Prof. James of the University of Chicago:

“Carry down the instruction in political sciences into our common schools. Human society is becoming conscious of itself. Society is beginning to think of these things. We are trying to govern all on the theory that every man, and perhaps every woman, is a political expert. Take for instance, to show the absurdity of this proposition, the division of labor in any line you may choose. A man is not expected nowadays to know how to make a shoe. He devotes his time to making a thirty-second part of it. Certain men devote themselves to the law and others to medicine. I can hardly tell you how many men it takes to make a pin. Yet we make in politics, or attempt to make, one man’s opinion as good as another’s. We say in theory, if not in fact, that one man’s opinion is as good as another’s. No other country on the face of the earth does now, or ever has, intrusted the government of the nation to the common man. Now, it has been recently demonstrated that we have the sort of patriotism throughout the land which is ready to go to war, upon any excuse, with any nation, large or small.”

THE NORMAL SCHOOL.

Another conviction brought home to us with impressiveness is that the schools are for the children and not for the teachers. *No promptings of charity, no feelings of mercy should ever have a particle of influence in keeping an inefficient person in the position of a teacher.* On this account the absorption by the city of the Normal School, and property, has already proved advantageous in that we now have a professional training school with an excellent corps of teachers. The faculty of the school is striving to give all-round training to all teachers; and thereby enable us to have our schools equipped with experts in teaching. The training of teachers for secondary education is as important, if not more so, as the training of kindergartners and primary teachers, and I suggest that it should be our determination to have our Normal School equal to the demands of our school system and embrace the training of all Chicago teachers from the kindergarten to the college. In attaining this object the faculty should have the support of the Board of Education, for a perfect Normal School means greater efficiency in school work. Then, too, I recognize that there is much in the contention that the one-year course is too brief for the best training. The money used for such training is by far the most economically expended of all school money when you estimate the ramifying influences, and the training of teachers should be commensurate with that for lawyers, ministers and physicians. An incompetent teacher in the Normal School means weakness through-

out our educational system, and I will add here that the present school buildings are illy fitted for their uses. Nine stores amid noisy, uncomfortable surroundings, constitute a makeshift adjunct to the school buildings proper, regardless of the comfort of the children or convenience of the teachers.

The Cook County Normal School was established in 1868. Its struggles against adverse circumstances, and its steady growth and development, are matters of educational history.

The City Training School at the Thomas Hoyne building was transferred to the Chicago Normal School at the beginning of the fall term, 1896. The city sent over four hundred high school graduates to prepare for work in our schools. More than three hundred received cadet certificates at the close of the present term.

No more important step, in my judgment, was ever taken for the enhancement of the value of the public schools of Chicago. The city spends its millions freely to guarantee every child born, or that lives within its borders, a good, sound education at public expense, and, as I have intimated before, through common education the State insures its future growth and prosperity.

A vast sum of money is yearly expended for comfortable buildings, apparatus, books and all that is necessary for mechanical organization. The largest item is the salaries of teachers. A poor teacher in a school is a cruel extravagance, imperiling the characters of the children and returning a miserable dividend on the people's money. To insure competent

teachers I again urge that the Normal School be sustained to an extent consistent with the funds available.

In conclusion, I desire to formally acknowledge my personal obligation to Mr. Daniel R. Cameron, whom I succeeded in the Presidency of the Board, and Col. Thomas Cusack, the Vice-President. Their co-operation I have always had. During the past year, Col. Cusack, as Chairman of the Committee on Buildings and Grounds, and Mr. Cameron, as Chairman of the Committee on Janitors and Supplies, with the assistance of their colleagues, have inaugurated reforms designed to maintain the strictest economy. To my fellow members, one and all, I return my thanks for their courtesy, and I cheerfully bear testimony to their unselfish devotion to the cause of popular education.

E. G. HALLE,
President.

REPORT OF THE SUPERINTENDENT.

REPORT OF SUPERINTENDENT OF SCHOOLS.

To the Board of Education of Chicago:

This forty-third annual report of the condition of the schools of Chicago, including the tabular statements of statistics required by the State law, is submitted for your consideration.

Sixty years have passed since Chicago became an incorporated city. A brief statement of facts relating to the growth of the city in population, the increase in school membership, and the cost of maintenance, as shown in the following table, will be items of interest for the public. The summary of statistics for the school year ending June 30, 1897, indicates the magnitude of the interests which are now committed to the Board of Education:

| Year. | Population. | Enrolled. | Average Member- ship. | Number of Teach'rs. | Paid for Tuition. | Total Expendi- tures. |
|---------|-------------|-----------|-----------------------------|---------------------------|----------------------|-----------------------------|
| 1837... | 4,170 | 400 | ..... | 5 | ..... | ..... |
| 1842... | *7,000 | 531 | ..... | 7 | \$ 2,290 | \$ 3,226 |
| 1847... | 16,859 | 1,317 | ..... | 18 | ..... | 4,248 |
| 1852... | *50,000 | 2,404 | 1,521 | 29 | 9,107 | 10,704 |
| 1857... | 84,113 | 8,577 | 3,688 | 70 | 23,365 | 29,720 |
| 1862... | 138,186 | 17,521 | 8,962 | 187 | 75,326 | 92,378 |
| 1867... | *220,000 | 27,260 | 16,392 | 319 | 227,525 | 296,672 |
| 1872... | 367,396 | 38,035 | 24,539 | 476 | 378,670 | 479,444 |
| 1877... | *420,000 | 53,529 | 39,495 | 730 | 450,252 | 551,621 |
| 1882... | 560,693 | 68,614 | 51,023 | 1,019 | 696,429 | 1,146,924 |
| 1887... | *750,000 | 84,902 | 67,186 | 1,574 | 1,121,722 | 2,020,738 |
| 1892... | 1,438,010 | 157,743 | 126,593 | 3,300 | 2,555,821 | 4,562,840 |
| 1897... | *1,800,000 | 225,718 | 190,471 | 4,914 | 4,044,644 | 6,611,492 |

*Estimated.

SUMMARY OF STATISTICS.

SCHOOL BUILDINGS.

| NUMBER OF BUILDINGS— | 1891-2. | 1892-3. | 1893-4. | 1894-5. | 1895-6. | 1896-7. |
|------------------------|---------|---------|---------|---------|---------|---------|
| Owned by the City..... | 230 | 251 | 269 | 281 | 295 | 316 |
| Rooms rented ..... | .... | .... | 236 | 271 | 296 | 282 |

TEACHERS.

| NUMBER OF PRINCIPALS— | 1894-5 | | 1895-6 | | 1896-7 | |
|--|--------|---------|--------|---------|--------|---------|
| | Male. | Female. | Male. | Female. | Male. | Female. |
| In High Schools..... | 13 | 0 | 14 | 0 | 14 | 0 |
| In Grammar and Primary Schools..... | 98 | 102 | 101 | 105 | 108 | 109 |
| Total number Principals | 111 | 102 | 115 | 105 | 122 | 109 |
| NUMBER OF ASSISTANTS— | 1894-5 | | 1895-6 | | 1896-7 | |
| | Male. | Female. | Male. | Female. | Male. | Female. |
| In High Schools..... | 100 | 112 | 114 | 130 | 128 | 134 |
| In Grammar and Primary Schools..... | 54 | 3,731 | 79 | 3,958 | 81 | 4,135 |
| Manual Training in Grammar Schools..... | .... | .... | 13 | 1 | 17 | 1 |
| Deaf Mute..... | 3 | 5 | 2 | 8 | 2 | 11 |
| Kindergarten ..... | .... | 49 | .... | 72 | .... | 108 |
| Chicago Normal..... | .... | .... | 8 | 15 | 9 | 11 |
| Special Teachers..... | 30 | 23 | 25 | 23 | 25 | 21 |
| Total number Assistants | 188 | 3,925 | 241 | 4,207 | 262 | 4,421 |
| Total number Principals and Assistants..... | 299 | 4,027 | 356 | 4,312 | 384 | 4,530 |
| Total number Teachers. | 4,326 | | 4,668 | | 4,914 | |

SCHOOL CENSUS.

| | School Census of 1890. | School Census of 1892. | School Census of 1894. | School Census of 1896. |
|-------------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| Total population of the City..... | 1,208,669 | 1,438,010 | 1,567,727 | 1,619,226 |
| Under 21 years of age..... | 473,234 | 542,163 | 658,646 | 694,912 |
| Between the ages of 6 and 21 years. | 289,433 | 329,796 | 403,066 | 448,597 |
| Between the ages of 4 and 6 years.. | ..... | 68,280 | 94,143 | 90,945 |
| Between the ages of 6 and 14 years. | 165,621 | 191,180 | 228,254 | 247,706 |
| Under 6 years of age..... | 183,801 | 212,367 | 255,580 | 243,315 |

PUPILS.

The following statement exhibits, in tabulated form, the items of enrollment, membership, attendance and promotions

for each of the departments of our public school system for the school year :

| | Total Enroll- ment. | Average Daily Member- ship. | Average Daily Attend- ance. | Pr. Ct. of Attend- ance. | No. of Pro- motions. |
|-------------------------------------|---------------------------|--------------------------------------|--------------------------------------|-----------------------------------|----------------------------|
| Normal..... | 523 | 459.7 | 436.5 | 94.9 | 463 |
| In Primary Department..... | 156,028 | 126,170.2 | 117,931.9 | 93.0 | 103,973 |
| In Grammar Department.... | 60,216 | 59,994.5 | 52,867.0 | 94.4 | 45,440 |
| In High School Department: | 8,838 | 7,847.1 | 7,497.0 | 95.5 | 6,201 |
| Deaf Mutes..... | 113 | ..... | ..... | .... | ..... |
| Total for the City..... | 225,718 | 190,471.5 | 178,192.4 | 93.6 | 156,077 |
| WHOLE NUMBER ENROLLED— | 1892-3. | 1893-4. | 1894-5. | 1895-6. | 1896-7. |
| Total for the year..... | 166,895 | 185,358 | 201,380 | 213,825 | 225,718 |
| Increase over previous year.... | 9,152 | 18,463 | 16,022 | 12,445 | 11,893 |
| AVERAGE DAILY MEMBERSHIP— | | | | | |
| Total for the year..... | 134,078 | 149,667 | 165,318 | 177,710 | 190,471 |
| Increase over previous year.... | 7,485 | 15,589 | 15,651 | 12,392 | 12,761 |
| AVERAGE DAILY ATTENDANCE— | | | | | |
| Total for the year..... | 124,094 | 139,332 | 154,216 | 165,569 | 178,192 |
| Increase over previous year.... | 6,453 | 15,238 | 14,884 | 11,353 | 12,623 |
| PER CENT OF PUNCTUAL ATTENDANCE— | | | | | |
| | 92.6 | 93.1 | 93.3 | 93.2 | 93.6 |
| SUSPENSIONS— | | | | | |
| For absence..... | 4,041 | 4,164 | 3,289 | 3,539 | 3,017 |
| For misconduct..... | 142 | 158 | 184 | 197 | 229 |
| AVERAGE DAILY MEMBERSHIP BY GRADES— | | | | | |
| | 1892-3. | 1893-4. | 1894-5. | 1895-6. | 1896-7. |
| First Grade..... | 29,479.6 | 33,538.2 | 36,734.0 | 37,032.0 | 38,943.4 |
| Second Grade..... | 25,442.4 | 26,985.1 | 29,197.8 | 32,364.7 | 32,948.0 |
| Third Grade..... | 22,769.0 | 24,087.8 | 25,504.5 | 27,284.6 | 29,623.2 |
| Fourth Grade..... | 16,938.0 | 20,293.5 | 21,460.6 | 22,860.7 | 24,655.6 |
| Total Primary Dept. | 94,629.0 | 104,904.6 | 112,896.9 | 119,542.0 | 126,170.2 |
| Fifth Grade..... | 13,825.9 | 15,727.0 | 18,855.4 | 20,410.0 | 22,120.6 |
| Sixth Grade..... | 9,700.8 | 11,235.3 | 12,484.9 | 13,879.9 | 15,605.9 |
| Seventh Grade..... | 6,357.0 | 7,213.4 | 8,340.0 | 9,573.3 | 10,846.3 |
| Eighth Grade..... | 4,481.3 | 5,204.9 | 5,938.6 | 6,785.6 | 7,421.7 |
| Total Gram. Dept. | 34,365.0 | 39,380.6 | 45,790.9 | 50,649.5 | 55,994.5 |
| Ninth Grade..... | 2,219.6 | 2,279.9 | 3,062.5 | 3,279.4 | 3,265.8 |
| Tenth Grade..... | 1,321.1 | 1,487.5 | 1,690.7 | 2,121.2 | 2,141.3 |

PUBLIC SCHOOLS.

| | 1892-3. | 1893-4. | 1894-5. | 1895-6. | 1896-7. |
|---------------------|-----------|-----------|-----------|-----------|-----------|
| Eleventh Grade..... | 878.4 | 942.4 | 1,095.2 | 1,190.2 | 1,453.0 |
| Twelfth Grade..... | 665.0 | 672.0 | 826.7 | 929.0 | 987.0 |
| Total High School | | | | | |
| Department..... | 5,084.1 | 5,381.8 | 6,631.0 | 7,519.8 | 7,847.1 |
| Chicago Normal..... | | | | | 459.7 |
| Total in all Depts. | 134,078.1 | 149,667.0 | 165,318.8 | 177,711.3 | 190,471.5 |

PERCENTAGE OF PUPILS IN EACH DEPARTMENT—

| | 1892-3. | 1893-4. | 1894-5. | 1895-6. | 1896-7. |
|-------------------------------|---------|---------|---------|---------|---------|
| Per cent in Primary Grades... | 70.57 | 70.09 | 68.29 | 67.27 | 66.24 |
| Per cent in Grammar Grades.. | 25.64 | 26.31 | 27.70 | 28.50 | 29.40 |
| Per cent in High Schools..... | 3.79 | 3.60 | 4.01 | 4.23 | 4.12 |
| Per cent in Normal School.... | | | | | .24 |

AVERAGE NUMBER OF PUPILS TO EACH TEACHER, NOT INCLUDING PRINCIPALS AND SPECIAL TEACHERS—

| | 1892-3. | 1893-4. | 1894-5. | 1895-6. | 1896-7. |
|---------------------------------|---------|---------|---------|---------|---------|
| In High Schools..... | 34 | 37 | 40 | 39 | 41.5 |
| In Gram. and Prim. Schools..... | 45 | 45 | 44 | 45 | 45 |

NUMBER OF PUPILS PROMOTED.

| | 1892-3. | 1893-4. | 1894-5. | 1895-6. | 1896-7. |
|----------------------------|---------|---------|---------|---------|---------|
| First to Second Grade..... | 25,506 | 26,550 | 30,084 | 29,042 | 29,020 |
| Second to Third Grade..... | 22,925 | 24,052 | 25,568 | 27,306 | 27,857 |
| Third to Fourth Grade..... | 19,998 | 21,500 | 23,070 | 23,354 | 25,495 |
| Fourth to Fifth Grade..... | 15,515 | 18,273 | 19,354 | 20,121 | 21,601 |

| | | | | | |
|------------------------------|--------|--------|--------|--------|---------|
| Total in Primary Grades... | 83,934 | 90,375 | 98,076 | 99,823 | 103,973 |
| Fifth to Sixth Grade..... | 11,666 | 13,715 | 14,433 | 15,669 | 17,335 |
| Sixth to Seventh Grade..... | 8,199 | 9,376 | 10,604 | 11,043 | 12,663 |
| Seventh to Eighth Grade..... | 5,541 | 6,493 | 6,958 | 7,656 | 8,735 |
| Eighth to Ninth Grade..... | 4,046 | 4,928 | 5,453 | 5,584 | 6,707 |

| | | | | | |
|-----------------------------|--------|--------|--------|--------|--------|
| Total in Grammar Grades.... | 29,452 | 34,512 | 37,448 | 39,952 | 45,440 |
|-----------------------------|--------|--------|--------|--------|--------|

Total number promotions in

| | | | | | |
|-------------------------|---------|---------|---------|---------|---------|
| Prim. and Gram. Grades. | 113,386 | 124,887 | 135,524 | 139,775 | 149,413 |
|-------------------------|---------|---------|---------|---------|---------|

PER CENT OF PROMOTIONS BASED UPON AVERAGE DAILY MEMBERSHIP—

| | 1892-3. | 1893-4. | 1894-5. | 1895-6. | 1896-7. |
|-------------------------|---------|---------|---------|---------|---------|
| Primary Department..... | 88.7 | 86.1 | 86.9 | 83.5 | 82.4 |
| Grammar Department.... | 85.7 | 87.6 | 82.9 | 78.9 | 81.2 |
| Both Departments..... | 87.9 | 86.6 | 85.5 | 82.1 | 82 |

AGES OF PUPILS.

The following statement exhibits the ages of pupils at

the date of their first enrollment during the year for the last five years:

| | 1892-3. | 1893-4. | 1894-5. | 1895-6. | 1896-7. |
|------------------------------|---------|---------|---------|---------|---------|
| Under 7 years of age..... | 23,988 | 29,633 | 34,085 | 35,909 | 37,766 |
| Between 7 and 8 years..... | 22,584 | 24,996 | 25,748 | 27,842 | 28,598 |
| Between 8 and 9 years..... | 21,623 | 22,629 | 23,793 | 24,957 | 26,490 |
| Between 9 and 10 years..... | 19,743 | 21,841 | 22,263 | 23,629 | 24,486 |
| Between 10 and 11 years..... | 18,196 | 20,363 | 21,840 | 22,549 | 23,817 |
| Between 11 and 12 years..... | 16,159 | 17,567 | 19,581 | 20,874 | 21,311 |
| Between 12 and 13 years..... | 14,819 | 16,261 | 17,963 | 19,691 | 21,211 |
| Between 13 and 14 years..... | 12,076 | 13,226 | 14,408 | 15,548 | 17,247 |
| Between 14 and 15 years..... | 8,093 | 8,628 | 9,789 | 10,185 | 11,161 |
| Between 15 and 16 years..... | 4,575 | 5,009 | 5,809 | 5,948 | 6,232 |
| Between 16 and 17 years..... | 2,441 | 2,661 | 3,081 | 3,454 | 3,413 |
| Over 17 years..... | 2,598 | 2,544 | 3,020 | 3,239 | 3,986 |
| Total..... | 166,895 | 185,358 | 201,380 | 213,825 | 225,718 |

The following statement exhibits the number in every one hundred pupils, under the ages given, for the past five years:

| | 1892-3. | 1893-4. | 1894-5. | 1895-6. | 1896-7. |
|---------------------|---------|---------|---------|---------|---------|
| Under 7 years..... | 14.4 | 15.9 | 16.9 | 16.8 | 16.7 |
| Under 8 years..... | 28.0 | 29.5 | 29.7 | 26.9 | 29.4 |
| Under 9 years..... | 40.9 | 41.7 | 41.5 | 41.5 | 41.1 |
| Under 10 years..... | 52.7 | 53.5 | 52.6 | 52.5 | 51.9 |
| Under 11 years..... | 63.6 | 64.4 | 63.4 | 63.1 | 62.5 |
| Under 12 years..... | 73.3 | 73.9 | 73.2 | 72.9 | 72 |
| Under 13 years..... | 82.2 | 82.7 | 82.1 | 82.1 | 81.4 |
| Under 14 years..... | 89.4 | 89.8 | 89.2 | 89.3 | 89 |
| Under 15 years..... | 94.2 | 94.5 | 94.1 | 94.1 | 93.9 |
| Under 16 years..... | 97.0 | 97.2 | 97.0 | 96.8 | 96.7 |
| Under 17 years..... | 98.4 | 98.6 | 98.5 | 98.5 | 98.2 |
| Over 17 years..... | 1.6 | 1.4 | 1.5 | 1.5 | 1.3 |

COST PER PUPIL.

| FOR TUITION ALONE— | 1892-93. | 1893-94. | 1894-95. | 1895-96. | 1896-7. |
|-----------------------------------|----------|----------|----------|----------|---------|
| Upon number enrolled..... | \$16.75 | \$16.37 | \$17.34 | \$17.81 | \$17.56 |
| Upon average daily membership... | 20.85 | 20.27 | 21.09 | 21.63 | 21.23 |
| Upon average daily attendance.... | 22.53 | 21.77 | 22.64 | 23.21 | 22.69 |
| FOR INCIDENTALS— | | | | | |
| Upon number enrolled..... | \$ 2.97 | \$ 2.89 | \$ 2.88 | \$ 2.87 | \$ 2.91 |
| Upon average daily membership... | 3.69 | 3.58 | 3.52 | 3.49 | 3.52 |
| Upon average daily attendance.... | 3.99 | 3.83 | 3.76 | 3.74 | 3.76 |

FOR ALL CURRENT EXPENSES, NOT INCLUDING
REPAIRS, PERMANENT IMPROVEMENTS, ETC.—

| | 1892-93. | 1893-94. | 1894-95. | 1895-96. | 1896-97. |
|-------------------------------------|----------|----------|----------|----------|----------|
| Upon number enrolled | \$19.72 | \$19.26 | \$20.22 | \$20.68 | \$20.47 |
| Upon average daily membership . . . | 24.55 | 23.85 | 24.61 | 25.12 | 24.75 |
| Upon average daily attendance . . . | 26.52 | 25.60 | 26.40 | 26.95 | 26.45 |

SCHOOL MEMBERSHIP AND ATTENDANCE.

The total enrollment of pupils during the year was 225,718, which was an increase of 11,873, or 5.56 per cent over that of the preceding year. The average daily membership was 190,471, which was an increase of 12,761, or 7.18 per cent over that of the year 1895-96. The average daily attendance was 178,192, which was an increase of 12,623, or 7.62 per cent over that of last year. The enrollment for 1891-2 was 157,743; for 1896-7 it was 225,718, an increase in the five years of 67,975, or 43 per cent. The average daily membership for 1891-2 was 126,593; for 1896-7 it was 190,471, an increase in five years of 63,878, or 50.4 per cent.

Sixty-six and twenty-four hundredths per cent of the average daily membership for the year was in the primary grades; 29.4 per cent in the grammar grades, and 4.36 per cent in the high and normal school grades.

An examination of the following statistics will show that the children are remaining in our schools longer, and consequently are advancing to higher grades and are securing a better education.

| | 1881-2. | 1886-7. | 1891-2. | 1896-7. |
|--------------------------------------|---------|---------|---------|---------|
| Per cent in Primary Grades | 77.02 | 75.2 | 71. | 66.24 |
| Per cent in Grammar Grades | 20.71 | 22.1 | 25.28 | 29.4 |
| Per cent in High Schools | 2.27 | 2.7 | 3.72 | 4.36 |

The Compulsory Education Law and the Child Labor Bill, prohibiting the employment of children under fourteen years of age, have done much to increase the school attendance.

HOW LONG PUPILS REMAIN IN SCHOOL.

It has been asserted in the press, in public places, and sometimes in school reports, that from 70 to 75 per cent of all the children were in the primary grades, and that consequently such children only secured a primary education. If the same number of pupils had been admitted to the first grade each year for the past eight years had been promoted regularly, and no changes had occurred, then one-eighth of all children would be in each grade; fifty per cent would be in the four primary grades and fifty per cent would be in the grammar grades. All who entered eight years ago would complete the grammar school course of study and be ready for admission to the high school.

The statistics this year show that $66\frac{1}{4}$ per cent of all the children are in the primary grades. After making allowance for deaths and removals, and the increase in total population which would be shown most in the lowest grades, and also for the deductions on account of the large number of children who leave the public schools when they are about twelve years old, to go to the church schools preparatory to confirmation, it is very evident that a very large per cent of all children *remain in school until they are fourteen years old*. There is also other

evidence that this is true, although we have not the exact statistics to corroborate the statement.

Last year the school census showed 247,706 persons in Chicago between six and fourteen years of age. There were enrolled in the public schools 213,825, and 62,827 were reported as enrolled in private schools, making a total of 276,652, or 28,946 more than the number of children between six and fourteen years old. After making allowance for those who are enrolled a part of the year in both public and private schools, and for those who are over fourteen, it will be observed that the statistics indicate that nearly all children between six and fourteen years of age attend school a part of each year.

The following statements are approximately correct and show the number and percentage of pupils who remain in school and pass from grade to grade :

There were 25,787 in the first grade in 1889-90. If all were promoted annually and no changes were made by increase or decrease in enrollment except those who annually entered the first grade, then the 23,179 in the second grade in 1890-91, which was 89.9 per cent of the number enrolled in the first grade the preceding year, the 20,706 in the third grade in 1891-92, which was 80.3 per cent of the number that first entered in 1889-90, the 16,938 in the fourth grade in 1892-93, which was 65.7 per cent of the first enrollment, the 15,727 in the fifth grade in 1893-94, or 61 per cent, the 12,484 in the sixth grade in 1894-95, or 48.4 per cent, the 9,573 in the seventh grade in 1895-96, or 37.1 per cent, and the 7,422 in the eighth grade in 1896-97, or 28.8 per cent, would represent the numbers and the per cent of the first enrollment which remained in school each year for eight years.

Examine the table again. There were 26,669 pupils in the first grade in 1890-91. If all were promoted annually and no changes were made by increase or decrease in enrollment, then the 24,606 in 1891-92 in the second grade, the 22,769 in 1892-93 in the third grade, the 20,294 in 1893-94 in the fourth grade, the 18,855 in 1894-95 in the fifth grade, the 13,880 in 1895-96 in the sixth grade, and the 10,846 in 1896-97 in the seventh grade, would represent the numbers which remained in school each year for seven years.

Then 70.7 per cent of those who entered in 1890-91 became members of the fifth grade in 1895, 52 per cent of them were in the sixth grade in 1896, and 40.7 per cent finished the seventh grade in 1897.

The following table shows the average daily membership and the number and per cent of those who belonged through successive years and grades :

| GRADE. | 1889-90 | 1890-91 | 1891-92 | 1892-93 | 1893-94 | 1894-95 | 1895-96 | 1896-97 |
|--------------|---------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| First..... | 25,787 | 26,669 | 26,684 | 29,480 | 33,538 | 36,734 | 37,032 | 38,943 |
| Second..... | | 23,179 89.9% | 24,606 92.3% | 25,442 88.7% | 26,985 91.5% | 29,198 87.1% | 32,365 88.1% | 32,948 89% |
| Third..... | | | 20,706 80.3% | 22,769 85.4% | 24,088 84% | 25,504 86.5% | 27,285 81.4% | 29,623 80.6% |
| Fourth..... | | | | 16,938 65.7% | 20,294 76.9% | 21,460 74.5% | 22,861 77.5% | 24,656 73.5% |
| Fifth..... | | | | | 15,727 61% | 18,855 70.7% | 20,411 71.2% | 22,121 75% |
| Sixth..... | | | | | | 12,484 48.4% | 13,880 52% | 15,606 54.4% |
| Seventh..... | | | | | | 8,340 | 9,573 37.1% | 10,846 40.7% |
| Eighth..... | | | | | | 5,939 | 6,786 | 7,422 28.8% |

NEW SCHOOL ACCOMMODATIONS.

Twelve new school buildings and nine additions have been built and occupied during the year, giving 13,470 additional sittings.

NEW BUILDINGS.

Cost of Building

1. *Pulaski School*, Leavitt and Coblantz Sts., opened September 5, 1896; 17 rooms, 918 seats..... \$ 63,318 80
2. *Victor F. Lawson School*, Homan Ave. and Palatine St., opened November 2, 1896; 19 rooms, 1010 seats..... 85,478 28
3. *Henry H. Nash School*, Erie and West 49th Sts., opened Sept. 5, 1896; Assembly Hall and 21 rooms, 1136 seats. 79,065 44
4. *Richard Yates School*, Cortland and Humboldt Sts., opened Jan. 4, 1897; Assembly Hall and 20 rooms, 1196 seats. 100,281 05
5. *Augustus H. Burley School*, Noble Ave., near Ashland Ave., opened Jan. 4, 1897; Assembly Hall and 22 rooms, 1162 seats..... 86,159 38

| | | |
|-----|---|--------------|
| 6. | <i>Wm. Penn Nixon School</i> , Dickens Ave. and N. 42d St., opened Jan. 4, 1897; 8 rooms, 432 seats..... | \$ 41,920 97 |
| 7. | <i>George Schneider School</i> , Wellington and Hoyne Aves.; opened Jan. 4, 1897; Assembly Hall and 19 rooms, 1080 seats | 76,744 51 |
| 8. | <i>Charles Warrington Earle School</i> , Hermitage Ave. and 61st St., opened Jan. 4, 1897; 10 rooms, 580 seats..... | 44,598 93 |
| 9. | <i>Franklin School</i> , Goethe St., between Wells and Sedgwick Sts., opened Jan. 4, 1897; Assembly Hall, Gymnasium, Office and 26 rooms, 1350 seats..... | 143,604 97 |
| 10. | <i>Charles Kozminski School</i> , 54th St. and Ingleside Ave., opened May 3, 1897; Assembly Hall and 22 rooms, 1080 seats..... | 85,940 83 |
| 11. | <i>D. R. Cameron School</i> , Monticello and Potomac Aves., opened March 29, 1897; 16 rooms, 810 seats..... | 70,361 10 |
| 12. | <i>John M. Smyth School</i> , West 13th St., near Blue Island Ave., opened May 3, 1897, 23 rooms, 1167 seats..... | 78,610 66 |

ADDITIONS TO OLD BUILDINGS.

| | | |
|----|--|-----------|
| 1. | <i>Goodrich School</i> , Taylor and Sangamon Sts., opened Sept. 5, 1896; 8 rooms, whole number of seats 1337, increase 409..... | 32,692 18 |
| 2. | <i>Foster School</i> , Union and 12th Sts., opened Sept. 5, 1896; 12 rooms, whole number of seats 1878, increase 686... .. | 53,626 08 |
| 3. | <i>McClellan School</i> , Wallace and 35th Sts., opened Jan. 4, 1897; 9 rooms, whole number of seats, 1242, increase 386..... | 44,598 93 |
| 4. | <i>J. N. Thorp School</i> , 89th St. and Superior Ave., opened Oct. 14, 1896; 12 rooms, whole number of seats 1020, increase 331..... | 51,645 45 |
| 5. | <i>Pickard School</i> , Oakley Ave. and West 21st Pl., opened Jan. 4, 1897; 9 rooms, whole number of seats 1030, increase 270..... | 44,574 84 |
| 6. | <i>Scanlan School</i> , Clark St., between 117th and 118th Sts., opened May 31, 1897; 12 rooms, whole number of seats 904, increase 565 | 49,616 04 |
| 7. | <i>Cornell School</i> , Drexel Ave., between 75th and 76th Sts., opened Jan. 6, 1897; 12 rooms, whole number of seats 1032, increase 586 | 55,113 82 |
| 8. | <i>Tilden School</i> , Lake and Elizabeth Sts., opened March 22, 1897; 4 rooms, whole number of seats 950, increase 150 | 20,837 37 |
| 9. | <i>Burr School</i> , Wabansia and Marshfield Aves., opened April 19, 1897; Assembly Hall and 16 rooms, whole number of seats 1987, increase 643..... | 78,488 73 |

There were 11,806 children attending school in rented rooms at the close of 1896, and there were 10,669 at the close of 1897, a decrease of 1,137. There were 15,036 children in half-day sessions at the close of 1896, and 12,475 at the close of 1897, a decrease of 2,561. The seating capacity of school buildings owned by the city, of rented rooms, and the number of pupils who were in half-day sessions, is shown in the following statement:

| | Seats in build- ings owned by City. | Increase over preceding year in build- ings owned by City. | Seats in Rented Rooms. | Pupils in Half-day Ses- sions at close of year. |
|-----------|---|--|---------------------------|--|
| 1889..... | ..... | ..... | 1,949 | 12,494 |
| 1890..... | 113,592 | Annexation | 5,476 | *..... |
| 1891..... | 121,159 | 7,567 | 7,628 | 15,773 |
| 1892..... | 132,465 | 11,306 | 8,773 | 18,069 |
| 1893..... | 141,968 | 9,503 | 10,862 | 14,375 |
| 1894..... | 162,127 | 20,159 | 10,867 | 14,086 |
| 1895..... | 174,205 | 12,078 | 12,643 | 17,545 |
| 1896..... | 188,724 | 14,519 | 13,507 | 15,036 |
| 1897..... | 202,194 | 13,470 | 12,368 | 12,475 |

*Not reported.

The increase in average daily membership for 1896-7 was 12,761, and as some of the new buildings have been built large enough to provide for one or two years' growth, it is evident that the 13,470 additional sittings in the new buildings have only slightly exceeded the natural growth for the year. Reference to the foregoing table shows that the city has not erected each year buildings fast enough to meet the growth of the city. Before Hyde Park, Lake, Jefferson, Lake View and other towns were annexed to Chicago, the growth in their territory was so rapid that it was necessary for those districts to levy the full two per cent tax for educational pur-

poses, to levy from two to three per cent more for building purposes, and then to issue bonds in addition to the tax in order to provide suitable school buildings.

The bonded indebtedness of the annexed districts was \$1,074,970, of which \$408,170 has been paid, leaving \$666,800 to be paid within the next few years. The sum of \$370,790 for interest on these bonds has also been paid. The Board of Education is attempting to furnish the necessary school buildings, which will last fifty years, on a tax of about three-fourths of one per cent, and to pay off existing indebtedness at the same time. No healthful, permanent and suitable buildings can be provided for those who are compelled to occupy unsanitary rented stores and dwelling houses until some extra appropriations are made for building purposes. As the rental has reached an amount equal to four per cent on \$2,000,000, business prudence demands that the city borrow that amount of money and build its own buildings. In addition to this, an annual tax of \$1,500,000 must be levied to purchase sites and build school houses to provide for the annual growth of the city.

NEW BUILDINGS NEEDED.

The attention of the Board of Education, the Common Council, and the public, is called to the demands for new school houses in the following localities:

| Ward. | Estimated Cost. |
|--|-----------------|
| 4. Site and 24-room building in vicinity of 39th St. and Indiana Av. (for South Division High School)..... | \$ 150,000 |

| Ward. | Estimated Cost. |
|--|-----------------|
| 5. Mark Sheridan School addition, 9 rooms..... | \$ 40,000 |
| 9. Site and 28-room building in vicinity of 18th and Laffin Sts | 140,000 |
| 10. Froebel School addition, 9 rooms, with more land..... | 50,000 |
| 10. Site and 20-room building, vicinity 25th St. and Albany Av | 85,000 |
| 12. Marshall School addition, 18 rooms..... | 85,000 |
| 13. Site and 12-room building, vicinity Kedzie Av. and Ohio St. | 55,000 |
| 14. Twenty-room building, Follansbee St..... | 70,000 |
| 14. LaFayette School addition, 12 rooms..... | 42,000 |
| 14. Site and 18-room building, vicinity Oakley and Potomac Aves..... | 75,000 |
| 15. Langland School Addition, 9 rooms, with more land..... | 48,000 |
| 16. Motley School addition, 9 rooms..... | 35,000 |
| 18. Site and 16-room building for English High and Manual Training School..... | 125,000 |
| 19. Polk Street School, rebuild..... | 75,000 |
| 21. Site and 18-room building, vicinity of Menominee and Wis- consin Sts..... | 100,000 |
| 21. Twenty-room building on Center Street lot for the North Division High School..... | 100,000 |
| 25. Alcott School addition, 7 rooms..... | 40,000 |
| 26. Prescott School addition, 9 rooms..... | 40,000 |
| 26. McPherson School addition, 6 rooms..... | 30,000 |
| 26. Belle Plaine Avenue School, 12 rooms..... | 40,000 |
| 26. Lake View High School addition, 16 rooms..... | 85,000 |
| 26. Rogers Park School, 8-room addition..... | 40,000 |
| 27. Site and 12-room building for Irving Park School..... | 50,000 |
| 27. Site and 6-room building for Jefferson Park School..... | 35,000 |
| 28. Bryant School addition, 8 rooms..... | 35,000 |
| 28. Tilton School addition, 9 rooms..... | 35,000 |
| 29. Shields School, 15 rooms..... | 70,000 |
| 29. Fallon School addition, 9 rooms..... | 35,000 |
| 29. Hendricks School addition, 6 rooms..... | 30,000 |
| 30. Site and 18-room building, vicinity 54th St. and Union Av.. | 90,000 |
| 30. Elsdon addition, 8 rooms..... | 35,000 |
| 31. Twenty-room building for Normal Practice School..... | 85,000 |
| 31. Auburn Park School addition, 8 rooms..... | 35,000 |
| 32. Farren School addition, 9 rooms..... | 40,000 |
| 32. Eighteen-room building on 49th Street and St. Lawrence Avenue lot..... | 65,000 |
| 32. Site and new building, 18 rooms, for Oakland School..... | 100,000 |
| 32. Site and new building, 20 rooms, for Springer School..... | 100,000 |

| Ward. | Estimated Cost. |
|--|--------------------|
| 33. Gallistel School, 16 rooms, rebuild..... | \$ 65,000 |
| 34. Madison Avenue School addition, 7 rooms..... | 30,000 |
| 34. West Pullman School addition, 8 rooms..... | 30,000 |
| 34. Site and 12-room building for Fernwood School..... | 50,000 |
| Total..... | <u>\$2,545,000</u> |

EVENING SCHOOLS.

The reports of former years, when a Presidential campaign was being carried on, showed that the attendance was very irregular during October, hence the Board decided not to open the evening schools until the Monday after the election, which was November 9, 1896. The appropriation was greatly reduced and 33 schools were opened, 12 less than in 1895-6. They were in session sixteen weeks. The attendance was more regular than during preceding years. The enrollment in the elementary schools was 9,117; in the high schools, 1,895; total enrollment, 11,012.

The results obtained in the evening schools demonstrate their great worth to the people who are learning to speak the English language, to those who only received a limited education in their youth, and to those who are glad to prepare themselves in book-keeping, stenography, typewriting, mechanical and architectural drawing.

TEACHERS.

There were 4,914 principals and assistants employed at the close of the school year; adding the substitutes, who are employed to fill temporary vacancies, and there were over five thousand teachers. The increase for the year in the perma-

ment teaching force is 246. To provide for the increased attendance, and to fill the vacancies caused by resignations, 429 new teachers were appointed; 208 were graduates of our Normal School and 221 were experienced grade teachers, kindergartners and teachers of German, who had passed the required examinations and had obtained certificates. The following are copies of the circulars, which state who may be examined and what branches are included in the examinations:

An examination of experienced teachers who desire positions in the Public Schools of Chicago will be held.....in the West Division High School building, corner Ogden Avenue and Congress Street, beginning at 9 o'clock A. M. Only those who have had at least four years successful experience in teaching, or who are college graduates, will be admitted to this examination. Applicants must file with the Superintendent of Schools, prior to the examination, satisfactory letters of reference showing four years' successful experience, or evidence of graduation from a four years' college course.

Applicants will be examined in the following subjects:

FOR ASSISTANTS IN GRAMMAR AND PRIMARY SCHOOLS.

75 per cent required.

MATHEMATICS—Arithmetic, Algebra to Quadratics, Plane Geometry.

GEOGRAPHY INCLUDING PHYSICAL GEOGRAPHY.

UNITED STATES HISTORY AND MODERN EUROPEAN HISTORY.

SCIENCE—Elementary Botany, Zoology, Astronomy, Physiology and Natural Philosophy.

ENGLISH LANGUAGE AND AMERICAN LITERATURE.

DRAWING AND VOCAL MUSIC.

PRINCIPLES AND METHODS OF TEACHING.

ASSISTANTS IN HIGH SCHOOLS.

An examination of candidates for certificates to teach in the High Schools of Chicago, which will be held.....in the West Division High School building, corner Ogden Avenue and Congress Street, beginning at 9 o'clock A. M.

First. All candidates will be examined in English Composition and Psychology.

Second. Candidates will be permitted to select subjects from one of the following groups, but not from both groups. Candidates selecting from

the first group will choose one subject as a major, the scope of which will be that usually comprehended in a college course of study, or that included in a subject which one has made a specialty, and two subjects as minors. When Latin is selected as a major study, Greek must be taken as one of the minors; when any other is taken as a major, Latin must be one of the minors.

First Group. (1) Latin, (2) Greek, (3) English Literature, (4) History, (5) Civics and Political Economy.

Candidates who choose the second group must select four subjects, of which one (except German and French) must be a major, and the other three minors.

If mathematics is selected as a major, Physics will be one of the minors; if Physics is selected as a major, Mathematics must be one of the minors. French or German will be considered as a minor only.

Second Group. (1) Mathematics, (2) Physics, (3) Chemistry, (4) Biology, (5) Geology and Astronomy, (6) French, (7) German.

Those who select Physics, Biology or Chemistry as a major will be required not only to prepare a written paper on the subject, but also to pass a laboratory examination in such subject.

Candidates who desire to teach French or German in the High Schools will be required to pass the examination in English Composition and Psychology, and a special examination, oral and written, in the French or German language, History and Literature.

Examinations for various positions were held with the following results:

| | Number Examined. | Number Successful. |
|---|---------------------|-----------------------|
| JUNE 30, 1896— | | |
| High School—Assistant Teachers..... | 123 | 13 |
| Assistants in Primary and Grammar Grades..... | 277 | 92 |
| SEPTEMBER 14, 1896— | | |
| Normal School—Assistant Teachers..... | 3 | 3 |
| DECEMBER 24, 1896— | | |
| Assistants in Deaf Mute Schools..... | 2 | 1 |
| JANUARY 2, 1897— | | |
| High Schools—Assistant Teachers..... | 3 | 3 |
| MARCH 11, 1897— | | |
| Assistants in Manual Training Department..... | 13 | 10 |
| MAY 1, 1897— | | |
| High School—Special Teachers of Singing..... | 9 | 3 |
| Grammar and Primary Schools—Special Teachers of Singing..... | 30 | 4 |
| JUNE 11, 1897— | | |
| Teachers in Kindergarten Department..... | 137 | 43 |

| JUNE 29, 1897— | Number Examined. | Number Successful. |
|--|---------------------|-----------------------|
| High School—Assistant Teachers..... | 169 | 22 |
| Principals of Grammar Schools..... | 87 | 11 |
| Assistants in Primary and Grammar Schools..... | 333 | 90 |
| Assistants in Manual Training Department..... | 3 | 2 |
| Assistants in Deaf Mute Schools..... | 7 | 7 |
| Total number examined and successful.... | 1196 | 304 |
| JUNE 17, 1897— | | |
| Admission to Normal School..... | 523 | 154 |

INSTRUCTION OF TEACHERS.

The teachers have been gradually led to see the best side of educational work, to appreciate the possibilities in the training of children, to recognize the importance of unity and harmony in the various studies, and to seek expertness in their work. They have attended the grade meetings which have been held for several years, under the direction of the Assistant Superintendents. They have organized classes in which they have received instruction in science, literature, history, music and drawing. About two thousand teachers have taken courses of lessons in some of the subjects embraced in the course of study, and have used the means offered to them for culture and for special preparation to teach efficiently, thus showing their devotion to the cause of education and their desire to render effective service.

To assist the teachers in their preparation for the year's work, five institutes were organized and conducted for one week, during the forenoons, commencing Monday, August 31, and closing Friday, September 4, 1896, prior to the opening of the schools. There were nearly thirty-five hundred teach-

ers who voluntarily attended and contributed one dollar each to pay the expense for securing special instructors.

The influence of these institutes was very noticeable in the work of the schools at the beginning of the year. The teachers commenced their duties with enthusiasm and with more definite plans and aims than ever before. There was no waste of time in organization nor delay in leading the children to the best work they were capable of doing.

PROGRAMS FOR THE INSTITUTES.

District No. 1, under the supervision of Assistant Superintendent, Mr. Alfred Kirk, at the Lincoln School building:

9 A. M. daily. A course of five lectures by Supt. Thomas M. Balliett, of Springfield, Mass.: 1—Education and Environment. 2—Thought Studies and Language Studies. 3—The Psychology of Language. 4—The Psychology of Language. 5—The Psychology of Reading.

2. At 10 A. M. daily. A course of five lectures by Prof. M. V. O'Shea, of the Buffalo Normal School: 1—Child Study—The Laws of Habit. 2—Child Study—Interest and Attention. 3—Child Study—Defects in School Children. 4—Child Study—Brain Fatigue and Adolescence. 5—Child Study—Children's Interest and Their Expression Through Drawing.

3. At 11 A. M. daily. A course of five lectures by Prof. W. S. Jackman, of the Chicago Normal School: 1—Life Conditions. 2—Life Conditions. 3—Problems in the Study of Life. 4—The Nature of Substances Found in the Living Thing. 5—Relations of Nature Study to Other Subjects.

District No. 2, under the supervision of Assistant Superintendent, Mr. W. W. Speer, at the Ellen Mitchell School building:

9 A. M. daily. A course of five lectures by Prof. W. S. Jackman, of the Chicago Normal School, on: 1 and 2—Life Conditions. 3—Problems Presented in the Study of Life. 4—The Nature of Substances Found in the Living Thing. 5—Relation of Nature Study to Other Subjects.

11 A. M. daily. A course of five lectures by Supt. Thomas M. Balliett, of Springfield, Mass., on: 1—Education and Environment. 2—Thought Studies and Language Studies. 3—The Psychology of Language. 4—The Psychology of Language. 5—The Psychology of Reading.

10 A. M. daily. The institute was divided into sections as follows:

Grades I and II—Sense Training, Ratios, Reading. Class exercises by Margaret E. Burke, Louise H. Ober, Nonie O'Callahan, John H. Tear, Lewis W. Colwell and Amanda F. Soelke.

Grades III, IV and V—Geography, Reading, Literature and Language. Three lectures by Miss Ada Van Stone Harris, of the Michigan State Normal School at Ypsilanti. Two exercises in Geography, including Relief Map Drawing, by Mr. G. A. Osinga and Mr. Georg T. Thomsen.

Grades VI, VII and VIII—Two lectures on Correlation of Studies, by Mrs. Ruth Morris Kersey, of the Chicago Kindergarten College. Two exercises in History, illustrated by map sketches, by Mr. John H. Loomis.

Districts No. 3 and No. 4, under the supervision of Mr. Edward C. Delano and Mr. Albert R. Sabin, Assistant Superintendents, at the West Division High School building:

9 A. M. daily. A series of lectures by Prof. W. D. McClintock, of the University of Chicago, on : 1—The Development of One's Literary Taste. 2—Stories in Literature and Life. 3—Novels, the Realistic and those of Fiction. 4—Macbeth, the Natural History of a Sin. 5—Modern Popular Poetry. Readings from Burns and Riley.

11 A. M. daily. A series of five lectures in Psychology, by Col. Francis W. Parker, Principal of Chicago Normal School.

10 A. M., Grades I and II. Numbers, by Mr. John H. Tear; Nature Study, by Miss Ida C. Shaver; Hygiene, by Mr. Charles H. Ford.

Grades III, IV and V. Geography—By Mr. Charles F. King, of Boston, Mass., author of King's Geographical Readers.

Grades VI, VII and VIII. Five lectures on history, by Dr. B. A. Hinsdale, of Michigan State University: 1—Why Should History be Taught in Schools? 2—The Choice of Facts. 3—The Organization of Facts. 4—Geography and History. 5—Helps.

Districts No. 5 and No. 6, under the supervision of Mr. James Hannan and Mr. Leslie Lewis, Assistant Superintendents, at the Normal School building:

8:30 A. M. daily. Vocal Music, Mr. E. H. Nourse.

9:00 A. M. daily. Educational Psychology, Col. F. W. Parker.

10:00 A. M. daily. History—7th and 8th grades, Miss Emily J. Rice.

10:00 A. M. daily. Mathematics—6th grade, Mr. W. M. Giffin.

10:00 A. M. daily. Geography—4th and 5th grades, Miss Zonia Baber.

10:00 A. M. daily. Number—3rd grade, Mr. Wm. J. Black.

10:00 A. M. daily. Reading—2nd grade, Mrs. Gudrun Thomsen.

10:00 A. M. daily. Nature Study, 1st grade, Miss Flora J. Cooke.

11:00 A. M. daily. Pedagogy, Pres. John W. Cook.

District No. 7, under the supervision of Assistant Superintendent, Mrs. Ella F. Young, at the Forestville School building:

8:30 A. M. daily. Singing, conducted by Mr. O. Blackman.

9:00 A. M. daily. A course of five lectures by Prof. William James, of Harvard University: 1—Reactions, Impulses, Instincts. 2—Association. 3—Attention. 4—Memory. 5—Will.

11 A. M. daily. 1—"Nature Study," by Mrs. Eva D. Kellogg. 2—"Literature for Boys and Girls," by Miss J. Rose Colby, of the Illinois State Normal University. 3—A course of three lectures by Mrs. Ella F. Young: First—Self-expression for the Child; second, Freedom for the Teacher; third, Ethics in the Schools.

10 A. M. daily. Institute in Sections.

Section I. A course of four lectures by Miss J. Rose Colby, of the Illinois State Normal University, on "Study of Dramatic Structure:" 1—Function of First Acts. 2—Creation of Dramatic Interest. 3—Treatment of Time. 4—Dramatic Irony. A lecture by Mrs. M. E. Lewis, on "Browning as a Dramatic Poet."

Section II. Five exercises in the "Study of the Historic Movement of Our Country:" 1—Discovery, Settlement, Colonial Wars. 2—Revolutionary Period. 3—1789 to 1830. 4—1830 to the Civil War. 5—The Civil War and the Reconstruction.

Section III. Five exercises on the "Study of the Potentialities of Plants," by Mr. Bradley Moore Davis, of the University of Chicago: 1—Potentialities of Plants. 2—The Struggle for Existence. 3—Artificial Selection. 4—Natural Selection. 5—The Problem of Heredity.

Section IV. Four exercises on the "Study of Method in Geography," by Miss Elizabeth Smith. 1—Physical Features of the Earth. 2—River Basins. 3—Development of Continents. 4—Industries and Commerce. "One Study of Fractions and the Relations of Quantity," by Mr. Walter J. Harrower.

Section V. Study of the "Possibilities of the First Two Years in Mathematics," by Miss Clara M. Newbecker: 1—First Steps in Numbers. 2—A Year's Work. 3—In the Second Year. 4—At the End of the Second Year. 5—Suggestive Variations. Experiments and illustrations, with three classes of children: 1—Those having their first lesson; 2—Those having finished a year's work; 3—Those having finished two year's work.

CHICAGO NORMAL SCHOOL.

The Training School for teachers which was maintained in the Thomas Hoyne School building from 1893 to 1896 was

transferred to the building at Englewood, formerly known as the Cook County Normal School, in September, 1896.

The transfer of this property from the county to the city in February, 1896, was made on the condition that all the students then attending the school should be retained until they had finished the required work, and that thereafter graduates of the county high schools only should be admitted to said school as county students to prepare for teaching.

A class of 434 graduates of the Chicago high schools was admitted to the Normal School in September, 1896. There were 91 graduates of the county high schools and students belonging to the county who were required to stay another year, before completing the work.

Enrollment for 1896-7:

| | |
|-----------------------|-----|
| From Chicago..... | 434 |
| From Cook County..... | 91 |
| Total..... | 525 |

Graduated June, 1897:

| | |
|-----------------------|-----|
| From Chicago..... | 375 |
| From Cook County..... | 88 |
| Total..... | 463 |

The graduates from the Normal School who belong to the city are required to cadet (practice teaching) successfully in some school in the city for four months before they are eligible for appointment.

| | |
|---|--------------|
| Amount paid for Teachers' salaries..... | \$ 43,457 75 |
| Amount paid for supplies..... | 9,516 36 |
| Amount paid for engineer, janitors and repairs..... | 6,397 13 |
| Total..... | \$ 59,371 24 |

The building is wholly inadequate to the needs of so large

a school. The Practice School of 497 pupils was moved to rented stores on Sixty-ninth street. A new building to accommodate all children between the Rock Island and Eastern Illinois Railroad tracks, south of Sixty-fifth street, is imperatively needed. Attention is called to the special report of the Committee on Normal School.

JOHN WORTHY MANUAL TRAINING SCHOOL.

The Common Council of Chicago imposed upon the Board of Education the responsibility of directing the training and instruction of the boys who are committed to the City Bridewell by the Police Magistrates. A suitable building of six class rooms, two large machine-shop rooms, a drawing room, a painting room, wash rooms and an office, was erected and the school was organized November 1, 1896. Mr. Robert M. Smith, who was the First Assistant in the English High and Manual Training School for seven years, was elected Principal, and six assistants were also elected.

About one-half of the time is devoted to manual training. The boys in attendance also receive instruction in reading, writing, arithmetic, book-keeping, history and civil government. The boys at this school are sentenced for brief terms, and very little can be accomplished in the way of their reformation. It is a creditable thing for the city to provide such excellent means for the proper employment of the boys during their imprisonment.

Could such a building and a suitable home be provided

for the boys and girls who have no parental control, who are turned out of school because they are insubordinate, and have not yet become criminals, many could be saved to honorable lives and useful citizenship instead of carrying forever in consciousness the brand of "Found guilty"—"Sent to the Bridewell for thirty days." Will it cost any more to care for them before they become criminals than after?

SCHOOLS FOR THE DEAF.

Six schools for the instruction of deaf children have been maintained during the year at the Agassiz and Lincoln Schools on the North Side; at the Wicker Park and Monroe Street Schools on the West Side, and at the Hartigan and Yale Schools on the South Side. Miss Mary McCowen, who established ten years ago a school for the instruction and training of deaf children *to speak*, and whose success in this work is known all over the United States, was employed by the Board of Education to be the Supervising Principal of the schools for the deaf. She began her duties in September, 1896, and, without making any radical changes, has been training the teachers to teach the children how to articulate words and to express their thoughts in speech. The processes are very slow, but the results accomplished with the youngest children were the most satisfactory, and indicate that if deaf children can be trained from early childhood, they can acquire the ability to converse with others. The rooms for the use of deaf children are in the regular school buildings, so that the

deaf children are associated with other children at recesses, before and after school, and in some cases the older pupils have recited some lessons with the grade classes.

The last Legislature passed a bill authorizing the establishment of classes for the instruction of deaf children in any school district, and providing also for the payment of one hundred and fifty dollars out of the school tax fund for every deaf child who was instructed in any public school by a licensed teacher of deaf children.

The average attendance of children in the schools for the deaf, last year, was about 80. The amount which Chicago may possibly receive for next year to maintain these special schools is \$12,000. It is estimated that there are over 250 deaf children in Chicago, who ought to be taught in these schools. There were 113 enrolled for the year 1896-7. The following is a copy of the new law :

AN ACT authorizing school districts managed by boards of education or directors to establish and maintain classes for the deaf in the public schools, and authorizing payment therefor from State common school funds. Approved June 11, 1897. In force July 1, 1897.

SECTION 1. *Be it enacted by the People of the State of Illinois, represented in the General Assembly:* That upon application by a board of education or directors of any school district of the State to the State Superintendent of Public Instruction, he shall grant permission to such board of education or directors and such board of education or directors shall thereupon be empowered to maintain as part of a public school, within its limits, one or more classes, having an average attendance of not less than three pupils, for the instruction of deaf persons over the age of three and under twenty-one years, residents of the State of Illinois.

SEC. 2. Such board of education or directors which shall maintain one or more classes for the instruction of the deaf shall report to the State Superintendent of Public Instruction annually, and as often as said State

Superintendent shall direct, such facts concerning such class or classes as he may require.

SEC. 3. The county superintendent of schools in each county is hereby authorized and directed to apportion and pay, out of the State common school fund received by such county, to the treasurer or other financial officer of such board of education or directors maintaining such class or classes for the instruction of the deaf, the sum of one hundred and fifty dollars for each deaf pupil, resident of such county, instructed in any such class for at least nine months during the school year, and a share of such sum proportionate to the term of instruction of any such pupil as shall be so instructed less than nine months during such year. If no such class shall be maintained in a public school in any county, but persons residing in such county shall attend such class in an adjoining county, with the permission of the county superintendent of the county not maintaining such class, then said superintendent shall pay to the financial officer of the board of education or directors of the district maintaining such class the amount above specified for each pupil attending such class in such other county.

SEC. 4. The sums provided in the next preceding section shall be paid by such county superintendent of schools as soon as may be after the receipt by him of the State common school fund in each year, upon satisfactory proof being made to him by the president and the secretary or clerk of such board of education or directors maintaining such class, of the number of pupils instructed in such class or classes, and their residences, and the period of time each such pupil shall have been so instructed in such class or classes for the preceding school year.

SEC. 5. All teachers in such classes shall be appointed by the State Superintendent of Public Instruction upon application of the board of education or directors of the school district maintaining such class or classes; the State Superintendent of Public Instruction to have the power to remove such teachers for cause. No person shall be appointed to teach any such class who shall not have first obtained a teacher's certificate, as provided by law, and who shall not have received specific instructions in the teaching of the deaf for a term of not less than one year.

FEEBLE MINDED CHILDREN.

Several children have been taught in the schools for the deaf, who have been found to be "weak-minded" and not deaf. The results of instruction in such cases have demonstrated that much can be done for this class of defectives. From reports made by the principals of the schools, I find

that there are between five and six hundred children who are classed as "feeble-minded" that are not in any school, nor are they receiving any training or instruction. Several instances have been cited where parents have had applications on file for three years at the State Asylum for Feeble-minded at Lincoln, Ill., but could not secure admission for their children because there was no room for them.

While I hold that the mission of the Board of Education is to provide for the proper education of normal children, and that the time and energies of our teachers should be given to those who are in possession of all their faculties, still the children who are either deaf or blind, or feeble-minded, or are even uncontrollable under our system of government in the schools, are entitled to the care and training which the State has assumed to give them in separate schools adapted to their special needs.

The Board of Education takes the census of the city, and is the only official body that can secure a knowledge of the number of defective children. Should not the needs of the "feeble-minded" children of Chicago be presented to the Legislature, and an effort be made to secure the erection of a building in Chicago which shall be connected with the State School at Lincoln, Ill.?

THE BLIND.

The need of a suitable institution to instruct the blind children of Chicago, without sending them to the State Insti-

tution for the Blind at Jacksonville, has been presented to the Common Council, which set apart \$50,000 out of the school tax to be used in purchasing a site and erecting a building. This school should also be sustained and managed by the State.

COMPULSORY EDUCATION.

The Department of Compulsory Education is directed by a Superintendent and fifteen agents, who are employed by the Board of Education. Whenever pupils drop out of school without any good reason being assigned, the names and residences of such pupils are reported to the Superintendent of Compulsory Education, who sends an agent to visit the parents and notify them about the requirements of the law and the penalties which may be imposed for neglect of its provisions. Many parents who are ignorant of the law's requirements immediately comply and send their children to school again. Many others, however, ignore the law and the notices filed by the agents and defy authority. No effort has been made to enforce the law by prosecution, hence the compulsory attendance officers seek only to persuade parents to send their children to school regularly. Some positive steps should be taken to enforce the law or to find out its weakness and then to secure amendments making it effective.

PHYSICAL TRAINING.

Physical Training is given to the pupils twice a day for five minutes. The beneficial effects are noted in expansion

of the chest, the habits of breathing, the poise of the body, the erectness in standing and walking, the freedom and grace in movement, and in the general good health of the pupils.

The new Franklin School is provided with a gymnasium and the grammar grade pupils have been trained in various exercises for half an hour twice a week. Simple apparatus has also been furnished to the Goethe and Chase Schools. Other schools have asked for the erection of a gymnastic apparatus in the school yards, but the requests have not been granted.

DRAWING.

The effort to properly relate the drawing to all the other work, and to make it the medium for the representation of ideas and the expression of thought, has continued. Pupils have been permitted to express in a whole picture, by colored crayons or by water colors, the ideas conveyed in their reading, or obtained from observation. The observation and study of pictures in single line work, in light and shade, in colors, have given pupils increased ability to interpret them, and enhanced their power to execute.

While teaching drawing from outline has not been, and ought not to be, abandoned, still too much limitation has been placed upon children in their efforts to express the truth. Color and light and shade have always appealed to children, and they are always eager to express their ideas of beauty as seen in nature.

The child's first means of expression would naturally be

through color and form, or in surface rendering. The *whole* thing gives first impressions, then comes the analytical power to express limitations and boundaries.

The effort to reproduce the exact form of objects leads to measurements, the use of the ruler and compass, or to constructive skill. This training is essential in the general education of a child, for it belongs to the industrial side and must not be neglected. It is, however, secondary in development and should follow mass expression as shown in nature.

MANUAL TRAINING IN GRAMMAR SCHOOLS.

The work in manual training for boys in the seventh and eighth grades has been extended during the year to 24 more grammar schools. One outfit of a teacher's bench and tools, 12 double work benches, accommodating 24 boys, and the necessary tools, will accommodate three classes a day, aggregating 15 classes or 360 boys each week. The total cost of an outfit is \$1,000. The material costs about \$150 a year. Manual training centers have been established in the following schools: Agassiz, Bowen, Carpenter, Douglas, Franklin, Curtis, Graham, Hammond, Jones, Kershaw, LaSalle, Medill, Tilden and Von Humboldt.

Instruction is given to classes from 90 schools; 4,992 boys having shop practice for one and a half or two hours each week. As soon as possible this work should be extended to every school. Each year's results show that the boys are greatly benefitted by the practice of making working-drawings

and in executing work with tools in accordance with drawings and specifications. The following is an outline of the work required :

SEVENTH GRADE.

Exercise No. 1, Drawing—Use of the compass, T-square and triangles; the elements of the circle; bisecting lines and angles.

Exercise No. 2, Sawing—Use of rip and panel saws; properties and treatment of pine lumber.

Exercise No. 3, Planing—Use of jack and smoothing planes; grinding and sharpening.

Exercise No. 4, Gauging—Use of marking-gauge, try-square and knife.

Exercise No. 5, A Ruler—An application of the gauge and knife to utility work; introduction of accurate measurement and repetition.

Exercise No. 6, A Shelf—An application of planing, sawing and gauging; introduction of boring and block-planing; use of nails and glue; drawing of plan and elevation.

Exercise No. 7, Sandpaper Block—A review of all previous work and introduction of the chisel and bucksaw; projection drawing.

Exercise No. 8, Salt Box—Bending wood; fitting hinges; elementary wood-carving; original ornamental design; varnishing and finishing.

Exercise No. 9, Nail Box—Accurate planing. (This exercise is a review, and may be used or not as occasion demands.)

Exercise No. 10, Towel Roller—Projection drawing; dovetail joining; planing a cylinder; original design for ornamentation.

EIGHTH GRADE.

Exercise No. 1, a Pen Tray—Built-up work; gouge used for concave work; hardwood and its various uses and applications; polishing and fine finishing.

Exercise No. 2, Hand Sled—Joining; duplication of parts; seasoning and drying of lumber; detail constructive drawing.

Exercise No. 3, Knife Box—Fitting and beveling; the structure and growth of trees.

Exercise No. 4, Sugar Scoop—Modeling with gouge, knife and turning-saw. (This is a "sense-of-form" exercise, the work being free-hand, except the drawing.)

Exercise No. 5, Table—Various designs are furnished for this final exercise, and an attempt is made to develop the pupil's ability in designing or in selecting a design.

A supplementary series of exercises is given below. These are attractive in design, and are used to stimulate the

pupils to better work, those pupils only being allowed to make an "extra" who have accomplished the regular work in a satisfactory manner.

SEVENTH GRADE.

Hardwood ruler, ink stand, blotting pad, soap dish, match safe, picture frame, hat rack, book holder, handkerchief box, paper rack, clothes horse.

EIGHTH GRADE.

Paper knife, lemon squeezer, bootjack, pencil box, envelope case, foot stool, blacking case, tool chest.

MODERN LANGUAGES.

Dr. G. A. Zimmermann, Supervisor of Modern Languages submits the following report :

During the past year the average membership of pupils pursuing the study of German rose to 28,933, being an increase of 2,718 over the membership in the preceding year. The total enrollment was 33,804. Of this number 15,231 pupils are of German parentage, 9,934 of Anglo-American, and 8,649 belong to other nationalities.

The corps of teachers of German employed in the Grammar Department consisted of 179 instructors, the average number of pupils to each being 188. A large per cent of this body of teachers taught in two different schools—a hardship, indeed, to each of them—but a hardship that economy necessitates. This plan kept the expenditures at a minimum, the proportionate cost per pupil not being materially increased.

The higher standard of scholarship, exacted of candidates who present themselves for examination, has had a tendency to exclude undesirable applicants, and bring into the field men and women who are thoroughly versed, not only in the special branch they desire to teach, but also in the regular English class-work. Moreover, only such persons are admitted to the examination, as have completed a course in our High Schools or equivalent institutions. Finally, all successful candidates, who have had no previous experience in teaching, are required to attend the regular classes in the Chicago Normal School for the period of one year. That the benefit

derived from the employment of this class of teachers is great, has been clearly proven in schools where the plan of combined English and German instruction by such teachers has been put into practice. The earnest effort thus to raise the standard of excellence may eventually pave the way to doing away with the specializing of this branch of study, and to making it, what it should be, a co-equal of Latin. It is an undisputable fact that the study of German is steadily gaining ground, not only in elementary schools, but also in colleges and universities. It is becoming more and more one of the requirements for admission to higher institutions of learning, being considered an equivalent of Latin in many of them.

Professor Gilman, President of Johns Hopkins University, says in this respect, that the knowledge of the German language is at the present time as indispensable to those who would lay claim to the title of student or of scholar, as was the study of Latin to the students and scholars of the Middle Ages. This opinion is also held by Professor Jordan, President of the Leland Stanford, Jr., University.

The advantages claimed for the study of Latin as an educational factor may be claimed with equal justice for the study of this modern tongue with its inexhaustible literary treasures, which are equalled only by the literature of Ancient Greece. The English tongue is of essentially Germanic origin; its construction and its form conform to that origin. Therefore, a study of the grammar and literature of the German language may be justly said to aid in the study of the grammar and literature of English.

Not many years ago it was thought that some so-called "Natural Method," of teaching a living tongue, was the only efficacious means towards the desired end of enabling pupils to use the language readily. "Conversation" became the watchword. Written work, grammatical forms, and other means of impressing the fundamental principles of the language upon the minds of the pupils were discarded or thrust into the background, and the expectation was that at the end of a remarkably short time the pupils thus taught would be able to converse in the language they studied, as they would in the vernacular. This method proved a failure. The fact had been entirely left out of consideration by these theorists, that the purpose of our public schools is really to lay a founda-

tion for future knowledge, and that they cannot possibly complete any one of the many subjects studied, in the sense that higher institutions are expected to finish such studies. With this in view, it has been aimed to shape the course of study in German in such a manner that pupils may acquire a working vocabulary and a reading knowledge of the language sufficient to aid them in that study should they leave school when they complete the sixth grade. They are also required to have some degree of facility in writing German.

During the following two years, in the seventh and eighth grades, a systematic study of the main points of the grammatical structure of German is undertaken. Pupils in these two grades are required to do precisely the same work that is expected of pupils beginning the study in the first year in the high schools, and they are credited with this on their entrance to the secondary schools, as they are allowed to enter second year classes in German.

That there is a spirit abroad among our pupils that incites them to greater effort than ever before, to make best of the opportunities afforded them in this study, is clearly shown by the interesting German programs rendered in almost all our schools on special days, such as Schiller's birthday, and various other memorable days.

The lectures on educational subjects at our institutes, the subsequent discussions of those subjects, and the class-work of children, exemplifying some special line of instruction, have all been of great benefit to our teachers, especially those whose experience is of recent date.

During the school year 1896-1897, the membership of pupils studying French in the High Schools of Chicago was 1,552. Those who studied German numbered 2,275. The fact that so many pupils were enrolled in French classes is especially encouraging, as the first-year pupils were confined in their choice of languages to Latin and German.

Great improvement in the study of both French and German has been noted this year, partly due to a careful revision of the course of study and an equally careful revision of the texts studied.

That the texts put into the hands of the pupils should be of an elevating as well as of an instructive character, is of the highest importance, and, for this reason, all texts that were not of this description, were rigidly barred out.

In conclusion, I desire to express my sincere appreciation of the devotion the teachers have shown to the interests of the pupils.

My hearty thanks are also due to all who have by their kindness encouraged the efforts of the teachers, and thereby made possible the improvement shown in the year's work.

DR. G. A. ZIMMERMANN,

Supervisor of Modern Languages.

HIGH SCHOOLS.

The following report of the condition of the High Schools has been submitted, at my request, by Dr. A. F. Nightingale, Assistant Superintendent in charge:

The year has been one of steady progress, unmarked by any serious interruptions or disaster, except the burning of the English High and Manual Training School, which occurred on November 12th, 1896. For a little time all manual work was suspended, but energetic efforts were made to secure temporary quarters, and on March 22d, 1897, the school, with all its machinery and equipments, was transferred to a new five-story factory building on the corner of West Adams and Jefferson streets, where, with renewed earnestness on the part of the Principal and his corps of teachers, much of the lost time has been made good, and a class of eighty boys was graduated on Friday evening, June 25.

The most unfortunate hindrance to the progress that ought to be expected of our high schools has been caused by their congested condition, which has compelled the maintenance of classes much too large, and the opening of branches at a distance from the central schools.

While teachers cannot be expected to do good work and the pupils to make efficient progress, with classes numbering over thirty-five, there have been many classes in Latin, Algebra, Geometry and English in several of the schools with a membership of sixty. It is no surprise, then, that from ten to twenty per cent in the first and second year classes are found hopelessly failing by the end of the first term. It is not the fault of previous instruction, nor can the blame be charged to the teachers of the high schools. It is the fault of a short-

sighted economy, which compels large classes and prevents teachers from giving that attention to individual pupils which in numerous cases is an imperative necessity.

The eighth grades of the elementary schools are provided with teachers thoroughly competent, conscientious, earnest, scholarly, and in the first year of the high schools the pupils meet with many of the best instructors, college educated, experienced, apt-to-teach. The remedy for a large number of failures consists in organizing no class with more than thirty-five pupils.

NEEDS OF BUILDINGS.

The Lake View High School building, erected in 1885 to accommodate 250 pupils, has long since been insufficient to care for the pupils attending this school. The present year there have been over 850 on the roll, and they have been located in four buildings, three of which are from a third of a mile to a mile distant from the central school. There have been more pupils belonging to this school in other buildings than in the school proper. Plans have been completed for two years for an additional building on the site of the present one, but funds and a disposition for its erection seem to be lacking.

A new site for the North Division High was purchased two years ago. It is sadly in need of a new building. The North Side is increasing in population with marvelous rapidity, and were two new buildings commenced to-morrow there would be over two thousand pupils ready to occupy them before they could be finished.

Seven rooms outside of the Englewood High will be needed in September for the accommodation of the thousand pupils which will be enrolled in that school.

The Lake High, South Chicago High, Calumet High, Jefferson High, will all be in a very crowded condition at the opening of the new year.

I fully appreciate the argument that the pupils of the elementary schools must be cared for first. This logic cannot be contravened, but the serious question is how long before all the children of school age, for whom the laws of the State provide, and who should be encouraged to secure the highest education which the statutes permit, shall find accommodations suited to their purposes and their advancement?

It is not my province to erect buildings, but I deem it my solemn and imperative duty, as a public servant, to call your attention, and that of the Board of Education, to a crying necessity, if the children of from fourteen to eighteen years of age are to have the advantage of the taxes which their parents cheerfully pay for their education in the public schools, and under the fostering care of home influence.

HIGH SCHOOL ASSOCIATION.

The High School Association reports the most successful year since its organization. It now has a membership of 215, or about 85 per cent of all the teachers employed in the city high schools. The enthusiasm displayed and the interest manifested have been most marked and gratifying. The earnest and effective work of its members has largely aided in advancing the standard of our high schools. While in no way trenching upon the individuality of the teacher, it has done much to harmonize the many varied interests of the schools.

Six general meetings have been held, all of which have been largely attended. At all these meetings a pleasing musical programme has been provided through the courtesy of Supervisor Gabriel Katzenberger. The topics presented and the speakers were:

"Education and Citizenship," Dr. A. C. Hirst. "Naturalness in Reading and Speaking," Professor R. L. Cumnock, Director of the School of Oratory, Northwestern University. "Greenland's Glaciers," illustrated by stereopticon, Professor Ralph S. Tarr, Cornell University. "The Public High School the College of the Future," Dr. Edmund J. James, University of Chicago. "Value of Certain Social and Economic Facts," Hon. Franklin MacVeagh. "English in the High School," Professor H. G. Buehler, Hotchkiss School, Lakeville, Conn. "The Evolution of Industrial Society," Professor Richard T. Ely, University of Wisconsin.

Sections and Sub-Sections of the Association were organized as follows:

Languages, History and Literature, Science; Sub-Sections, Latin and Greek, French and German, English; History, Mathematics, Civics and Political Economy; Chemistry,

Physical Geography, Geology and Astronomy, Physics, Drawing.

Over forty meetings were held.

STUDY OF THE LANGUAGES.

There were 8,405 pupils in the several high schools at the close of September, 1896. Of that number 435 were in the English High and Manual Training School, which leaves 7,970 in the thirteen other schools. Of this number 5,430, or 68 per cent, were studying Latin; 2,113, or 26 per cent, were studying German; 1,437, or 18 per cent, were pursuing French, and 300, or less than 4 per cent, were studying Greek. Of the 435 in the English High, 74 studied French. These statistics show a gain of 6 per cent in Latin pupils, of 4 per cent in German pupils, and a loss of but 1 per cent in French pupils, notwithstanding the fact that this language is confined to the last three years of the course, instead of being, as heretofore, an optional study in the first year. We believe the foreign-language course is made stronger by the change.

The per cent studying Latin in the several schools was as follows: Hyde Park, Calumet and Jefferson, each 78 per cent, a gain of 3 per cent for the Hyde Park, 1 per cent for Jefferson and 7 per cent for Calumet; Englewood 73 per cent, a gain of 5 per cent; West Division 71 per cent, a gain of 4 per cent; South Chicago 70 per cent, a loss of 6 per cent; Lake View 68 per cent, same as last year; Northwest Division 65 per cent, a gain of 2 per cent; South Division 59 per cent, a gain of 7 per cent; North Division 55 per cent, a loss of 4 per cent; Lake 44 per cent, a gain of 8 per cent; Medill 64 per cent, a gain of 5 per cent, and the Marshall 74 per cent, the same as last year.

GRADUATING CLASS.

It is interesting to note from year to year, not only the increasing number of graduates, showing the popularity and growth of the high schools, but also the increasing per cent of those who endure to the end. As the years go by, and better educated teachers and more skilled workmen are demanded, and intelligence and mental acumen are placed at a greater premium, our young people will enter the high schools in larger numbers, and fewer will discontinue their studies

before the end of the course, and still larger year by year will be the number who will pursue a college education.

The present graduating class entered the high school four years ago at an average age of 14 years and 10 months. Last year's class entered at 15 years and 1 month and the class of 1895 at 15 years and 3 months. This is a gain of five months in two years, and it is about the age at which pupils ought to enter upon a high school course. The following are the averages in each school :

Lake High entering at 13 years and 10 months, and graduating at 17 years and 6 months. Northwest Division entering at 14 years and 6 months, graduating at 18 years and 9 months. South Division entering at 14 years and 8 months, graduating at 18 years and 6 months. Englewood and South Chicago entering at 14 years and 9 months, graduating at 18 years and 7 months. North Division entering at 14 years and 10 months, graduating at 18 years and 8 months. Hyde Park entering at 15 years and graduating at 18 years and 10 months. West Division entering at 15 years and 1 month and graduating at 19 years. Calumet entering at 15 years and 2 months and graduating at 19 years. Jefferson entering at 15 years and 3 months and graduating at 19 years and 1 month. Lake View entering at 15 years and 4 months and graduating at 19 years and 2 months. English High entering at 15 years and 6 months and graduating (three years course) at 18 years and 5 months.

The youngest graduate is Master Edward M. Luce of the Hyde Park High, who was only 14 years and 3 months old, or but seven months older at graduation than the average age of all at the time of their entering four years before.

PER CENT OF GRADUATES.

There are some noteworthy facts connected with the development of our high schools from year to year, which, rightly estimated, will show an increasing appreciation of the privileges these schools afford. It is natural that the total number should increase each year; it is especially gratifying, however, that a larger per cent of those who enter remain to graduate.

In June, 1895, 794 graduated; in June, 1896, 888, and the present year, 1,014. Twelve per cent more graduated in 1896 than in 1895, and fourteen per cent more in 1897 than in 1896.

In September, 1893, there were 2,422 pupils entering the first-year class. In June, 1897, four years later, we find 1,014, or 42 per cent, graduating.

In June, 1895, 34 per cent of the class entering four years before graduated; in June, 1896, 36 per cent of those entering September, 1892, graduated, while this year 42 per cent of the entering class of September, 1893, graduated, a gain, in staying quality, of 8 per cent in two years.

The graduating class consists of 278 boys and 736 girls, or a little more than 27 per cent boys and a little less than 73 per cent girls.

ATTENDING COLLEGE.

Of the 1014 graduates of this year 243, or 24 per cent, express a purpose to pursue a college course of study. Last year 21 per cent had this purpose, a gain of three per cent this year, and as our course of study and that of the colleges become more elastic and better adapted to individual needs, larger and larger numbers will go from our high schools to college. Hyde Park High reports nearly 35 per cent; Lake View and Calumet $33\frac{1}{2}$ per cent; Lake High $32\frac{1}{4}$ per cent; South Division and Jefferson 30 per cent; South Chicago $25\frac{1}{2}$ per cent; Englewood $16\frac{1}{2}$ per cent; North Division 16 per cent; West Division 15 per cent, and the Northwest Division but $5\frac{1}{2}$ per cent.

MISCELLANEOUS PLANS.

Of the entire class 15 per cent present various plans for the future, such as a purpose to study music, art, architecture or to enter a professional school or a business college, or to engage at once in some active business, while 13 per cent have no well-defined plan, which implies, on the part of the girls, home life, which, properly appreciated and enjoyed, may be as profitable as any vocation.

PER CENT OF ATTENDANCE.

Much more care was taken in granting certificates of qualification to grammar school pupils to enter the high schools last June than formerly; 481 more graduated from the grammar schools in June, 1895, than June, 1894, while there was an increase of but 121 in June, 1896, over the class of June, 1895.

Of those who graduated from the eighth grade in June,

1891, 23 per cent graduated from the high schools June, 1895 ; also 23 per cent of those who graduated from the eighth grade June, 1892, graduated from the high schools in June, 1896.

The number who graduated from the eighth grade June, 1893, was 4,046, and the number just graduated from the high school is 1,014, or 25 per cent of those who left the grammar school four years before, which is a gain of two per cent.

Of the 5,584 who graduated from the grammar schools in June, 1896, there were 3,551, or 64 per cent, in the first year of the high schools at the close of last September.

While 65 per cent of our grammar school pupils who graduate at the age of fifteen enter the high schools, and 40 per cent of those who enter graduate at the age of nineteen from the high schools, and 25 per cent of these pursue a college course of study, the public will spend its money for a grand purpose, and grand will be the results.

RATIO OF BOYS.

The very small ratio of boys to girls in our high schools is a matter of deep concern. What is the remedy? Surely it cannot be that parents consider the education of girls of more importance than that of boys. The citizen, the father, the mother, needs in the present day the very highest education that circumstances will enable him to secure. Are we not offering the boys privileges which are attractive, opportunities within their appreciation? Our Academic High Schools in their equipment, their teachers, their studies, equal any in the country, but I am convinced that we need two more Manual Training Schools. There were 430 boys in the English High and Manual Training the past year, and 65 per cent of them resided on the West Side. The long hours, the time consumed in going to and fro from the North and South Sides, render it quite impracticable for all who may desire to take advantage of this school, and I doubt not there would be 400 more boys taking a similar course, were a school opened on the North and one on the South Sides.

In a city like Chicago there is an imperative demand also for a first-class central commercial high school.

In September there were in the high schools 2,582 boys, which were 30 per cent of the whole ; there were 5,823, or 70 per cent, girls, a total of 8,405. This is a gain for the boys of one per cent over last year. Of the several high schools,

Calumet had the largest per cent of boys, viz., 34 per cent ; Hyde Park had 32 per cent, Jefferson 31 per cent, Medill 30 per cent ; Lake View a little over and Englewood a little less than 29 per cent, South Chicago 28 per cent, South Division 27 per cent, North Division 26 per cent, Northwest Division 25 per cent, Lake 22 per cent, West Division 21 per cent and the Marshall but 19 per cent.

PER CENT OF LOSS OF PUPILS.

Of the 3,551 pupils who entered the first-year class in September, 2,857, or 80 per cent, remained to finish the year in June, a gain of 1 per cent over 1896 and of 2 per cent over 1895. The first-year pupils diminished 20 per cent.

In all the schools at the end of September there were 8,405 pupils, and at the end of June 7,080, or 84 per cent, of the number who finished the first month. There was a loss of 16 per cent in all the schools during the year, about the same as last year.

Of the separate schools the Northwest Division lost the most, or 20 per cent of its pupils, which, however, is 9 per cent less than last year, and 13 per cent less than two years ago ; the Marshall lost 18 per cent, which is 1 per cent less than last year ; the South Division, Englewood and Hyde Park each lost 17 per cent, which is $1\frac{1}{2}$ per cent less for Hyde Park, 1 per cent less for South Division and 1 per cent more for Englewood than last year ; all of the foregoing sustained a greater loss than the general average ; Lake View and the Englewood each lost 16 per cent, same as the average, which is 2 per cent less for the English High and 5 per cent more for the Lake View High than last year ; the North Division lost 15 per cent, which is $1\frac{1}{2}$ per cent less than last year, and Lake lost 15 per cent, which is 7 per cent more than last year. South Chicago, Medill and Calumet each lost 14 per cent, which for South Chicago and Medill is 6 per cent less, and for Calumet $4\frac{1}{2}$ per cent less than last year. The West Division lost 13 per cent, which is 1 per cent less than the year before, while the Jefferson High, which lost but $2\frac{1}{2}$ per cent last year, enjoys the rare distinction of not having lost any, but closed the year with two more pupils than were enrolled at the end of September. At the end of September, 1896, there were 3 per cent more pupils in attendance than in September, 1895,

while in June, 1897, there were 5 per cent more than in June, 1896.

EDUCATION OF TEACHERS.

Some inquiries have been made during the year concerning the character and extent of the education of the high school teachers, and I have taken pains to ascertain the facts bearing upon the matter. All the principals of the high schools but one are college educated. Of the teachers, exclusive of those who teach German, French, Drawing, Vocal Music and Physical Culture, seventy-nine per cent have had a college education, and less than five per cent of those who have been elected during the last five years were not college graduates. Ten are graduates of Wellesley, seven of Vassar, six of Smith, while some of the other colleges represented in the teaching force are Harvard, Yale, Dartmouth, Cornell, Brown, Williams, Oberlin, University of Michigan, University of Wisconsin, University of Chicago, Northwestern University and University of Illinois. Eight per cent are graduates of public high schools, seven per cent of normal schools and five per cent of seminaries. Nearly all, however, of the three latter classes have taken special courses of study in some university, quite generally in the University of Chicago, during the last few years.

We believe it very important that none but college graduates, and but few without experience in teaching in similar schools, should be employed to teach in the high schools of Chicago. To secure teachers of ability, of scholarship and of experience, however, salaries somewhat commensurate with their worth, must be paid. While New York City pays \$5,000 to the principals of its high schools, Chicago can not be regarded extravagant when it pays but \$3,000 to men in like positions, whose duties are as onerous, whose responsibilities are as great and whose scholarship and experience are as good as those which characterize the principals of any other high schools in the country.

CONCLUSION.

I am pleased to acknowledge the excellent spirit which pervades the principals and teachers in our high schools, and to express my personal gratitude for the willingness which has been manifested to meet the requirements made upon them.

In conclusion, I am forced to appeal to the Board of Ed-

ucation for better accommodations, and smaller classes, if the ends for which the public support the high schools are to be secured.

A. F. NIGHTINGALE,

Asst. Supt. in Charge of High Schools.

THE SCHOOL HOUSE FOR THE PEOPLE.

The school house was the center for all social meetings in the early history of our country, when the people lived on farms and in small villages. It was the place for lectures, singing schools, district meetings, debating societies, and often a place of worship. In large cities the school house has been closed to all meetings, except those arranged for children. Community and neighborhood interests have been overlooked in the new conditions of society. In the large cities people hardly know the names of their next door neighbors, and they give but little attention to each other. The tendency is toward selfishness, indifference, negligence of the needs of others and suspicion of all. The children know each other, have common interests in school, and through them the parents may be brought to the school, and may become interested in its work. The school house may be made a place where parents may gather to consider some of the questions relating to education, to discuss some of the great social questions which pertain to the welfare of their own neighborhoods and of the whole city. The social settlements which have been established in various sections of the city have accomplished so much in interesting the people in their localities that it may be well asserted that in nearly every school sub-district

much can be done by lectures and entertainments to help the people to a better understanding of their social relations, to lead them to appreciate the benefits of social life, and to develop a better understanding of their rights, duties and privileges as parents and citizens.

A new movement to interest and instruct the people was instituted during the winter of 1896-7. A series of free lectures and entertainments were arranged in the following school buildings: Douglas, Lewis-Champlin, Medill, Northwest Division High, West Division High and the Franklin. The lectures at the Medill School were provided by the Hull House. Every night the hall, which accommodates 500 people, was crowded. The following subjects were presented by the lecturers named:

February 2—"Greenland," Prof. Rollin D. Salisbury, University of Chicago.

February 5—"The National Park," Prof. John M. Coulter, University of Chicago.

February 9—"Views from Everywhere," Mr. T. Dundass Todd, editor of Photo-Beacon.

February 12—"Stories of the Soul Among Savages," Prof. Wm. I. Thomas, University of Chicago.

February 16—"Paris," Miss Enella Benedict, Art Institute.

February 19—"The Battles of the Rebellion," Mr. John D. Cress, Chicago.

February 23—"Gold and Gold Mining," Mr. Wm. H. Van Arsdale (Consulting Engineer).

February 26—"The Story of the Brain," Prof. George Herbert Mead, University of Chicago.

March 2—"Japan," Rev. James Gibson Johnson, New England Church.

March 5—"The Russian Peasant and Count Tolstoi," Miss Jane Addams, Hull House.

March 9—"Afield with a Camera," Mr. T. George Hislop, Chicago.

March 10—"Travels in Mexico," Prof. Frederick Starr, University of Chicago.

The Trustees of the Wm. H. Ryder Fund also co-operated with the Board of Education, which furnished the buildings, light and janitor service, and presented the following lecture courses to the people. In all an average of three thousand people attended the lectures during 1896-7:

Douglas School:

February 18—"The Tribes of the Northwest Coast," Prof. Frederick Starr, University of Chicago.

February 25—"The Tribes of the Northwest Coast," Prof. Frederick Starr, University of Chicago.

March 4—"Mounds and Their Builders," Prof. Frederick Starr, University of Chicago.

March 8—"Pueblos and Cliff Dwellings," Prof. Frederick Starr, University of Chicago.

March 11—"Aztecs and Mayas," Prof. Frederick Starr, University of Chicago.

March 18—"The Native Races of North America," Prof. Frederick Starr, University of Chicago.

March 25—"Abraham Lincoln," by Mr. Wm. E. Watt.

April 1—"Yellowstone Park," by Mr. Wm. I. Marshall.

Franklin School:

March 2—"Yellowstone Park," by Mr. Wm. I. Marshall.

March 9—"Benjamin Franklin," by Prof. E. E. Sparks, University of Chicago.

March 16—"Samuel Adams," by Prof. E. E. Sparks, University of Chicago.

March 23—"Thomas Jefferson," by Prof. E. E. Sparks, University of Chicago.

March 30—"Robert Morris," by Prof. E. E. Sparks, University of Chicago.

April 6—"Alexander Hamilton," by Prof. E. E. Sparks, University of Chicago.

April 13—"George Washington," by Prof. E. E. Sparks, University of Chicago.

April 20—"Abraham Lincoln," by Mr. Wm. E. Watt.

Lewis-Champlin School:

February 17—"George Washington," by Mr. Wm. E. Watt.

February 24—"Greek Art, Formative Influences and National Characteristics," by Prof. Lorado Taft.

March 3—"Early Greek Sculpture and Architecture," by Prof. Lorado Taft.

March 10—"The Age of Pericles, Phidias and the Parthenon," by Prof. Lorado Taft.

March 17—"Praxiteles and His Contemporaries," by Prof. Lorado Taft.

March 24—"The Hellenistic Age of Sculpture," by Prof. Lorado Taft.

March 31—"Greek Art in Rome," by Prof. Lorado Taft.

April 7—"A Trip to the Rocky Mountains," by Mr. Wm. I. Marshall.

Northwest Division High School:

February 19—"George Washington," by Mr. Wm. E. Watt.

February 26—"Introduction and Analysis of a Town," Prof. Chas. R. Henderson, University of Chicago.

March 5—"The Houses of Our Town," Prof. Chas. R. Henderson, University of Chicago.

March 12—"The Industries of Our Town," Prof. Chas. R. Henderson, University of Chicago.

March 19—"Institutions of Culture," Prof. Chas. R. Henderson, University of Chicago.

March 26—"The Feeble and Anti-Social," Prof. Chas. R. Henderson, University of Chicago.

April 2—"Institutions of Ideals," Prof. Chas. R. Henderson, University of Chicago.

April 9—"A Trip to the Rocky Mountains," by Mr. Wm. I. Marshall.

West Division High School:

February 23—"Ancestral Homes of the Washingtons in England," Prof. J. J. Lewis.

March 16—"The Pilgrims in England," Prof. J. J. Lewis.

March 23—"The Pilgrims in Holland," Prof. J. J. Lewis.

March 30—"The Puritans in England," Prof. J. J. Lewis.

April 6—"Abraham Lincoln," by Mr. Wm. E. Watt.

April 13—"Yellowstone Park," by Mr. Wm. I. Marshall.

The Trustees of the Wm. H. Ryder Fund have the income from \$10,000, which amounts to about \$400 per annum that will be used to provide a course of lectures for the people during each winter. Assurances have been given that other courses of lectures will be provided by citizens of Chicago who appreciate the great good which may be accomplished.

There are many incidents occurring each year showing the deep interest which parents and citizens have in the welfare of the children who attend our schools. The walls of many school rooms are made attractive and teach silent lessons in beauty, love and patriotism; in art, history and literature; and have a refining and ennobling influence upon the pupils of the room. The teachers must be commended for their efforts to make their rooms attractive by pictures,

flowers, cabinet collections, magazines, papers and books. The active co-operation of the pupils and parents with the teachers has resulted in furnishing some of the schools with valuable paintings, engravings and statuary.

The Lake View Woman's Club secured three pieces of statuary, which were on exhibition in the collection of the Pestalozzi-Froebel Haus from Berlin, Germany, in the Manufactures Building at the World's Fair in Chicago. The teachers and parents in three schools assisted in raising the money necessary to secure these works of art. "The Mother and Children," by B. Heising, sculptor, was placed in the hall of the Louis Nettelhorst School; "The School Children," by Moesinger, was put in the hall of the Horace Greeley School, and "The Knitters," by Bolte, adorns the hallway of the Prescott School. As the children pass these groups every day, beautiful lessons of mother's love, school employment and home industry will be taught. The club has also given to each school three beautiful pictures to hang in the hallways. They have also given to the Alcott School one hundred volumes of books as part of a memorial library in honor of Gertrude Williams, the former principal. Parents' meetings have been held in several of the buildings where there are assembly rooms. Short lectures or talks have been given on various topics relating to the home, school and the community. Pupils have sung songs, recited selections, and an exhibit of some of the drawings and written papers, also work from manual training shops, have been presented.

Teachers have a chance to meet the parents of their pupils under favorable conditions and are able to secure their co-operation in all efforts for the advancement of their children. Friction between the home and the school is often removed by these conferences.

SCHOOL CHILDREN'S AID SOCIETY.

The School Children's Aid Society was organized under the auspices of the Chicago Woman's Club, for the purpose of clothing the poor and needy children of Chicago during the winter so that they can attend school. The club contributed five hundred dollars and the members received and solicited donations of money and material, had children's garments made, purchased ready-made clothing and attended to the work of filling orders. The children and teachers of the public schools have contributed a "Thanksgiving Offering" each year. Last year \$4,278.06 was collected. All requisitions for clothing are made by the principals after a careful investigation of each case. The money contributed to the society is made to furnish at least three times as much relief as would be furnished if it was expended in small sums in the separate schools. The women who have so faithfully labored in the School Children's Aid Society deserve the gratitude of all who have been assisted, and the thanks of all interested in the education of the children of the poor.

DISCIPLINE.

Given a symmetrically developed character, a comprehen-

sive knowledge of subjects taught, and an intimate knowledge of children's individual peculiarities and needs, and we have the characteristics of the best teachers in all ages. The true teacher is most potent in the silent influences that radiate from him. Children are impressed, inspired, transformed by his *spirit*. They quickly discern "whatsoever things are true, whatsoever things are honest, whatsoever things are just, whatsoever things are pure, whatsoever things are lovely, whatsoever things are of good report, if there be any virtue, and if there be any praise (they), think on these things."

Discipline has a very different signification to the teacher of the present day from that which prevailed a quarter of a century ago. Then it meant enforced obedience to rules and regulations, which were formulated by boards of education and interpreted by principals and teachers to mean a prompt compliance with every request and command. The pupil was wholly subjective to the will and plans of the teacher.

When the right to inflict corporal punishment was taken from the teachers there was developed in the schools higher, nobler, purer motives for action. Appeals were made to the moral and spiritual nature of children, and the power of self-investigation and self-control was cultivated. Much more real moral power is unfolded under the present system of discipline through an awakened moral consciousness than under the old system. Through the teaching of precepts, maxims, laws and the penalties for their violation, we may bring children to an intellectual appreciation of their duties and obligations, but

real moral power comes by a voluntary exercise of all the virtues. The school is a social organization, individuals are recognized in it, the activities and relations of individuals give the opportunity for the development of moral power.

The relation of school discipline to moral education was presented clearly by Dr. Wm. T. Harris, United States Commissioner of Education, at the meeting of the National Educational Association at Milwaukee. The idea presented should be thoughtfully considered by every teacher, and much of this paper could be profitably read and discussed by the pupils of the higher grades. It is published in the "Third Year-Book of the National Herbart Society." I quote the introduction and conclusion of his paper:

There is no topic related to education in the schools that excites so general discussion as that of moral education. And yet there is no topic concerning which the suggestions made are more idle and unprofitable. It is generally assumed that moral instruction is moral philosophy. Now the elementary schools do not attempt with success philosophical instruction of any kind, and in the nature of the case could not give successful lessons in moral philosophy. On this account it has been supposed that there is no moral instruction in the elementary schools. To correct this, suggestions are made on every hand for the preparation of some catechism which should form an introduction to moral philosophy, or more often it is suggested that religious instruction should be introduced for this purpose. Perhaps Bible reading alone without note or comment is proposed as the best means of meeting the want that is felt.

The important question that meets us at this point is, What is the difference between intellectual education and

moral education? When we consider its answer we come very soon to the conviction that moral philosophy belongs to intellectual education. For it treats of principles and causes. It belongs to theory, while the moral should relate especially to practice. Moral instruction, strictly speaking, should secure the formation of correct moral habits. The nature of morality is explained in moral philosophy. A correct habit of thinking, a correct view of the world is important enough for moral education, but it does not amount to a moral education, but is only one side of it. One side perhaps leads to the other. Possibly a correct habit of thinking regarding the moral will lead gradually towards the practice of the moral. And certainly a practice of the moral will lead towards a correct thinking as regards the moral.

Again, the more elementary the grade of education the greater the preponderance of practice over theory. It would seem that the children in the primary schools and the grammar schools should be taught moral practices and habits, and that gradually as they go on through the secondary schools and into higher education they should learn the full theory of the ethical.

However this may be, as soon as one approaches the course of education as it is found realized in the existing school systems in America, he comes upon the fact that the matter of moral instruction in the schools belongs to the side known as discipline and not to the side known as instruction in books and theory."

* * * * *

In closing let us call up the main conclusions and repeat them in their briefest expression.

1. Moral education is a training in habits and not an inculcation of mere theoretical views.
2. Mechanical disciplines are indispensable as an elementary basis of moral character.
3. The school holds the pupil to a constant sense of

responsibility and thereby develops in him a keen sense of his transcendental freedom; he comes to realize that he is not only the author of his deed, but also accountable for his neglect to do the reasonable act.

4. Lax discipline in a school saps the moral character of the pupil. It allows him to work merely as he pleases, and he will not reinforce his feeble will by regularity, punctuality, and systematic industry. He grows up in habits of whispering and other species of intermeddling with his fellow pupils; neither doing what is responsible himself nor allowing others to do it. Never having subdued himself, he will never subdue the world of chaos, or any part of it, as his life work, but will have to be subdued by external constraint on the part of his fellow men.

5. Too strict discipline, on the other hand, undermines moral character by emphasizing too much the mechanical duties, and especially the phase of obedience to authority, and it leaves the pupil in a state of perennial minority. He does not assimilate the law of duty and make it his own.

The law is not written on his heart, but is written on his lips only. He fears it, but does not love it. The tyrant teacher produces hypocrisy and deceit in his pupils. All manner of fraud germinates in attempts to cover up shortcomings from the eye of the teacher. Even where there is simple implicit obedience in the place of fraud and the like there is no independence and strength of character developed.

The best help that one can give his fellows is that which enables them to help themselves. The best school is that which makes the pupils able to teach themselves. The best instruction in morality makes the pupil a law unto himself. Hence strictness which is indispensable must be tempered by such an administration as causes the pupils to love to obey the law for the law's sake.

COURSE OF STUDY.

The outlined work for the four years' course of study for

high schools is in close harmony with the recommendations made by the several conferences of teachers of secondary and higher schools, and pupils can prepare for admission to any college. As we have several elective studies, pupils who do not intend to go to college can profitably spend the fifth year in the high school, taking up extra studies, which would be exceedingly valuable as a part of a general education. Last year biology was placed in the second year and physiography introduced into the first year; physics and chemistry were advanced to the third and fourth years from the second and third. The omission of physical geography from the course of study proved a mistake, and in taking it up again in a broader and more specific way, a better foundation will be laid for other science studies.

The course of study adopted three years ago for the elementary schools has remained practically unchanged. The study of the fundamental operations in algebra and the first principles in geometry, as a part of the work in mathematics of the eighth grade, has proved a valuable discipline, and pupils show increased power to deal with mathematical problems.

The work in English history for the first five months of the eighth grade has given pupils a limited knowledge of the origin and history of the English-speaking people, of the laws relating to trial by jury, legislative representation, personal rights and religious freedom. It has also revealed the conditions which led to the settlements in America and to the en-

actment of laws benefitting all the people, which laid the foundations for the establishment of a government of the people by the people.

The study of the government of the city, county, state and nation, has been supplemented by the discussion of topics relating to the rights and duties of citizens, taxation, public improvements, civil service, standards of value, wealth, capital, labor, competition, relation of employer to employes, corporations, treatment and prevention of crime, moral and social questions, the tariff and our commercial and social relations to other nations. These discussions have been based upon readings from Dole's American Citizen which has been furnished to the schools as a supplementary reader.

The science lessons which have been given under the heading of Nature Study have been kept within the limits of the observing and investigating power of the pupils. In the higher grades, the study of geography offers a field for the pupil, full of interest. Much attention has been given to the physical geography of Chicago and vicinity. Its geographical history presents the following interesting facts: That the land upon which Chicago stands was originally part of the bed of Lake Michigan, with an outlet down the Illinois River, and that it is now being restored by cutting the Drainage Canal; that there are deposits from the glacial period southwest of the city; that there are four stone quarries within the city limits; and that geographical changes are still going on by the action of nature's forces. There are two lakes wholly

within the limits of Chicago, one having an area of nearly four square miles, the other covering three-fourths of a section, and another lake having an area of nearly three square miles, half of which is in Chicago and the other part in Indiana. They are the Calumet, Hyde and Wolf Lakes. The study of the plants and trees, their structure, their parts and their functions; of seeds and their germination; of the relation of soil moisture, temperature, air and light to their growth; of birds and insects, their structure, their habits and relations to vegetable life; in fact, the observation and study of all the phenomena at work in nature effecting great changes, are making our pupils keener in all their perceptions, their reasonings and their judgments. Many teachers and their pupils have examined the collections in the Academy of Sciences on the North Side, the Columbian Museum on the South Side, and various parks, in connection with their science lessons.

Latin was made an optional study in the seventh and eighth grades in September, 1895. Classes were organized in forty schools and thirteen hundred and forty-nine pupils were enrolled. During the year 1896-7 it was taught in sixty-four schools to twenty-one hundred and seventy-eight pupils. Those who have studied it for two years will enter the second year class in Latin in the high schools. Careful observations are being made as to the effect of the study of Latin in the Grammar School upon the pupil's general education and upon his power to use and interpret the English language.

Methods of instruction in primary grades have been greatly changed within the last decade. All things which interest children are used as agencies to develop their power to see, to comprehend and to express clearly and definitely. Their activities are not repressed unnecessarily, but are directed to definite ends and purposes. The requirements of the course of study in the first grade are so general that teachers have the fullest freedom to apply any and all methods and to take up any subject as a center of interest for the children. The plays, the stories, the construction work with splints and blocks, the moulding in sand, the paper cutting, the weaving and the picture-making which are found in so many of our first grade rooms, indicate the modifications which have been made. Most of them are traceable to the kindergarten principles and methods which have been introduced into the primary work.

The work of the first three years of a child's school life is recognized as very important, and in most cases determines his future educational development. These are years of rapid brain growth; the time when the emotional nature is susceptible to every influence of home, street and school; a period when all sense perceptions should be cultivated and developed by work that will lead the child to right thought, right words, right action and right relations to others.

The *process* by which he learns to observe, to think, to express, "to read, write and cipher," is more important than the facts of knowledge acquired. The processes fix methods, develop habits and determine character.

Appreciating the paramount importance of making the primary work as efficient as possible along right lines of psychological and mental development, the superintendents and principals have given the subject of primary education much attention, and have had frequent conferences with the teachers.

The ideal standard of education has not been reached. All advances give us a more comprehensive view of the possibilities in human development, more definite knowledge of the agencies and forces at work in nature, and a truer adjustment of ourselves to all physical, intellectual and spiritual laws.

CONCLUSION.

Let me assure the members of the Board that their efforts to exalt the work of teaching by placing the full responsibility of selecting teachers and directing the educational work upon the Superintendent and his Assistants have been appreciated. It has been our endeavor to merit your confidence and that of the public by a faithful, impartial and efficient administration of the trust which you have committed to us.

I gratefully appreciate the unvarying kindness, judicious counsels and effective co-operation of the President of the Board, and the confidence, personal courtesies, and fidelity to the school interests of individual members.

Respectfully submitted,

ALBERT G. LANE,

Superintendent.

TABLE

Showing enrollment, membership, attendance and promotions in the several schools, together with the per cent of attendance and the per cent of promotions for the year ending June, 1897.

| SCHOOL. | Enrollment. | Average Daily Membership. | Average Daily Attendance. | Promotions. | Per Cent of Attendance. | Per Cent of Promotions. |
|--------------------------------|-------------|---------------------------|---------------------------|-------------|-------------------------|-------------------------|
| Chicago Normal..... | 523 | 459.7 | 436.5 | 463 | 94.9 | 100.0 |
| Calumet High..... | 234 | 206.1 | 196.2 | 169 | 95.2 | 82.0 |
| Englewood High..... | 906 | 832.7 | 777.0 | 627 | 95.6 | 77.4 |
| English High and Manual Tr.... | 439 | 397.5 | 380.1 | 320 | 95.6 | 80.5 |
| Hyde Park High..... | 1,360 | 1,192.8 | 1,111.3 | 978 | 93.1 | 82.0 |
| Jefferson High..... | 226 | 205.2 | 200.7 | 197 | 97.8 | 86.0 |
| Lake High..... | 376 | 329.9 | 321.9 | 263 | 97.6 | 80.0 |
| Lake View High..... | 887 | 799.6 | 768.1 | 653 | 96.1 | 81.6 |
| Marshall High..... | 335 | 279.9 | 263.5 | 235 | 94.0 | 83.9 |
| Medill High..... | 311 | 275.3 | 265.0 | 220 | 96.2 | 79.9 |
| North Division High..... | 627 | 568.3 | 538.9 | 452 | 94.8 | 79.5 |
| Northwest Division High..... | 789 | 689.0 | 654.0 | 492 | 94.9 | 71.4 |
| South Chicago High..... | 277 | 245.8 | 236.7 | 202 | 96.3 | 82.2 |
| South Division High..... | 856 | 751.4 | 717.2 | 501 | 95.4 | 66.7 |
| West Division High..... | 1,215 | 1,093.7 | 1,049.0 | 892 | 96.0 | 81.6 |
| Adams..... | 1,193 | 1,002.3 | 940.7 | 819 | 93.9 | 81.7 |
| Agassiz..... | 1,382 | 1,189.4 | 1,131.6 | 768 | 95.1 | 64.5 |
| Alcott..... | 1,144 | 992.7 | 932.6 | 978 | 94.0 | 98.5 |
| Alice L. Barnard..... | 577 | 477.8 | 439.0 | 478 | 91.9 | 100.0 |
| Andersen..... | 1,789 | 1,495.3 | 1,408.8 | 998 | 94.0 | 66.7 |
| Andrew Jackson..... | 1,148 | 924.4 | 862.2 | 713 | 93.2 | 77.1 |
| Armour Street..... | 1,369 | 1,154.8 | 1,083.3 | 900 | 93.8 | 77.9 |
| Arnold..... | 1,137 | 986.5 | 932.5 | 908 | 94.5 | 92.0 |
| Auburn Park..... | 899 | 743.0 | 689.0 | 688 | 92.7 | 92.6 |
| Audubon..... | 1,150 | 963.4 | 907.5 | 829 | 94.2 | 86.0 |
| *Augustus H. Burley..... | 130 | 536.5 | 503.3 | 378 | 94.0 | 70.4 |
| Avondale..... | 852 | 742.4 | 691.3 | 648 | 93.1 | 87.3 |
| Bancroft..... | 1,189 | 1,041.4 | 996.7 | 908 | 95.7 | 87.2 |
| Bass..... | 1,466 | 1,144.1 | 1,047.5 | 773 | 91.6 | 67.6 |
| Beale..... | 1,984 | 1,626.9 | 1,526.2 | 1,319 | 93.8 | 81.1 |
| Belle Plaine Avenue..... | 364 | 307.6 | 286.6 | 200 | 93.2 | 65.0 |
| Bernhard Moos..... | 725 | 590.4 | 563.0 | 473 | 95.4 | 80.1 |
| Bismarck..... | 1,059 | 943.0 | 890.3 | 792 | 94.4 | 84.0 |
| Blaine..... | 973 | 844.6 | 797.2 | 632 | 94.4 | 74.8 |
| Blue Island Avenue..... | 657 | 547.9 | 515.6 | 541 | 94.1 | 90.9 |
| Boulevard..... | 58 | 329.1 | 306.1 | 329 | 93.0 | 100.0 |
| Bowen..... | 218 | 195.5 | 185.8 | 129 | 95.0 | 66.0 |
| Bowmanville..... | 198 | 180.1 | 173.0 | 82 | 95.8 | 45.5 |
| Brainard..... | 877 | 741.2 | 697.8 | 575 | 93.7 | 77.5 |
| Brenan..... | 1,082 | 799.7 | 730.9 | 734 | 92.6 | 91.8 |
| Brentano..... | 1,105 | 1,003.1 | 981.3 | 880 | 97.8 | 87.7 |
| Brighton..... | 1,217 | 979.4 | 919.8 | 839 | 94.6 | 85.7 |
| Brown..... | 1,208 | 1,039.0 | 983.1 | 964 | 94.6 | 92.8 |
| Brownell..... | 680 | 595.9 | 555.0 | 488 | 93.1 | 81.9 |
| Bryant..... | 656 | 560.0 | 531.8 | 501 | 95.0 | 89.4 |
| Buckley..... | 361 | 267.8 | 238.1 | 148 | 88.9 | 55.2 |
| Burnside..... | 504 | 423.7 | 398.1 | 364 | 94.0 | 85.9 |
| Burr..... | 1,882 | 1,511.0 | 1,403.2 | 1,382 | 92.9 | 91.4 |
| Burroughs..... | 883 | 690.0 | 641.5 | 615 | 93.0 | 89.1 |
| Calhoun..... | 1,085 | 905.8 | 844.1 | 697 | 93.2 | 76.9 |
| Calumet Avenue..... | 836 | 692.2 | 646.3 | 518 | 93.3 | 74.8 |
| Carpenter..... | 1,940 | 1,746.0 | 1,657.9 | 1,438 | 95.0 | 82.3 |
| Carter..... | 768 | 699.8 | 644.3 | 546 | 92.1 | 78.0 |
| Central Park..... | 814 | 760.2 | 701.9 | 737 | 96.6 | 96.9 |
| *Chas. W. Earle..... | 80 | 252.4 | 228.1 | 181 | 90.1 | 71.7 |

| SCHOOL. | Enrollment. | Average Daily Mem- bership. | Average Daily At- tendance. | Promotions. | Per Cent of Attendance. | Per Cent of Promotions. |
|------------------------|-------------|-----------------------------------|-----------------------------------|-------------|----------------------------|----------------------------|
| Chase..... | 1,257 | 990.0 | 926.3 | 584 | 93.6 | 60.0 |
| Chicago Lawn..... | 652 | 549.9 | 508.9 | 461 | 92.5 | 83.1 |
| Clarke..... | 1,753 | 1,497.9 | 1,437.5 | 1,216 | 96.0 | 81.2 |
| Colman..... | 789 | 604.7 | 556.0 | 557 | 91.9 | 92.1 |
| Columbus..... | 989 | 857.1 | 804.7 | 786 | 93.9 | 91.7 |
| Cooper..... | 1,563 | 1,314.8 | 1,249.6 | 915 | 95.0 | 70.0 |
| Cornell..... | 752 | 706.8 | 659.3 | 537 | 93.3 | 76.0 |
| Cummings..... | 319 | 258.7 | 239.1 | 213 | 92.4 | 82.3 |
| David Swing..... | 1,081 | 906.3 | 855.0 | 727 | 94.3 | 80.2 |
| Dore..... | 1,085 | 829.2 | 752.3 | 576 | 91.4 | 70.0 |
| Douglas..... | 1,366 | 1,185.9 | 1,101.2 | 1,130 | 92.1 | 95.3 |
| †D. R. Cameron..... | 508 | 471.5 | 442.9 | 443 | 94.0 | 93.9 |
| Drummond..... | 1,185 | 1,014.3 | 953.5 | 772 | 94.0 | 76.1 |
| D. S. Wentworth..... | 1,417 | 1,232.0 | 1,124.4 | 959 | 91.3 | 77.9 |
| Eighteenth Street..... | 411 | 374.9 | 360.2 | 305 | 96.1 | 81.3 |
| Ellen Mitchell..... | 1,921 | 1,623.3 | 1,492.5 | 1,456 | 92.0 | 89.7 |
| Ellis Avenue..... | 287 | 228.8 | 211.5 | 205 | 92.4 | 90.0 |
| Emerson..... | 1,016 | 829.2 | 780.0 | 686 | 94.1 | 82.7 |
| Everett..... | 881 | 729.6 | 681.2 | 574 | 93.4 | 78.7 |
| Fallon..... | 816 | 659.9 | 597.5 | 562 | 90.5 | 85.2 |
| Farragut..... | 1,268 | 1,083.7 | 1,032.3 | 771 | 95.0 | 71.1 |
| Farren..... | 930 | 775.6 | 722.1 | 593 | 93.1 | 76.5 |
| Fernwood..... | 338 | 286.8 | 269.4 | 246 | 93.9 | 85.8 |
| Forestville..... | 1,600 | 1,423.3 | 1,338.5 | 1,048 | 94.0 | 73.6 |
| Foster..... | 2,146 | 1,754.5 | 1,583.7 | 1,453 | 90.3 | 82.8 |
| Franklin..... | 1,679 | 1,351.1 | 1,272.9 | 1,165 | 94.2 | 86.2 |
| Froebel..... | 1,500 | 1,235.5 | 1,183.0 | 900 | 95.7 | 72.9 |
| Fulton..... | 1,160 | 911.8 | 832.1 | 737 | 91.2 | 80.8 |
| Gallistel..... | 728 | 592.5 | 548.5 | 538 | 92.5 | 90.8 |
| Garfield..... | 1,966 | 1,587.0 | 1,478.7 | 965 | 90.3 | 60.8 |
| George Howland..... | 1,196 | 831.9 | 786.5 | 585 | 94.5 | 70.3 |
| George H. Thomas..... | 754 | 652.2 | 611.6 | 504 | 93.7 | 77.3 |
| *George Schneider..... | 755 | 668.1 | 622.8 | 454 | 93.0 | 67.9 |
| George W. Curtis..... | 1,024 | 881.5 | 832.8 | 789 | 94.5 | 89.5 |
| Gladstone..... | 902 | 775.2 | 730.2 | 632 | 94.2 | 81.5 |
| Goethe..... | 1,189 | 1,013.1 | 959.1 | 772 | 94.7 | 76.2 |
| Goodrich..... | 1,348 | 1,194.3 | 1,105.4 | 1,166 | 92.5 | 97.6 |
| Graham..... | 1,598 | 1,346.3 | 1,234.4 | 1,173 | 91.7 | 87.1 |
| Grant..... | 876 | 742.9 | 701.9 | 689 | 94.5 | 92.8 |
| Greene..... | 1,141 | 985.0 | 915.9 | 801 | 93.0 | 81.3 |
| Greenwood Avenue..... | 975 | 818.4 | 752.2 | 769 | 91.9 | 93.9 |
| Gresham..... | 489 | 448.2 | 418.4 | 407 | 94.0 | 90.8 |
| Hamilton..... | 1,241 | 899.0 | 845.0 | 535 | 94.0 | 59.5 |
| Hammond..... | 1,479 | 1,320.8 | 1,232.4 | 981 | 93.3 | 74.3 |
| Hancock..... | 839 | 690.6 | 641.0 | 547 | 92.8 | 79.2 |
| Harrison..... | 1,571 | 1,292.6 | 1,223.5 | 1,003 | 94.7 | 77.6 |
| Hartigan..... | 318 | 270.8 | 250.3 | 212 | 92.4 | 78.2 |
| Harvard..... | 339 | 260.7 | 238.4 | 242 | 91.4 | 92.8 |
| Haven..... | 1,096 | 862.1 | 788.8 | 740 | 91.5 | 85.8 |
| Hawthorne..... | 1,259 | 1,088.4 | 1,025.6 | 860 | 94.2 | 79.0 |
| Hayes..... | 961 | 791.1 | 738.9 | 613 | 93.4 | 74.8 |
| Headley..... | 745 | 670.4 | 638.9 | 629 | 95.3 | 93.8 |
| Healy..... | 1,466 | 1,217.7 | 1,145.3 | 959 | 94.0 | 78.7 |
| Hedges..... | 569 | 478.0 | 442.9 | 317 | 92.7 | 66.3 |
| Hendricks..... | 1,148 | 987.0 | 918.9 | 937 | 93.1 | 94.9 |
| Henry Clay..... | 396 | 313.8 | 293.8 | 275 | 93.6 | 87.6 |
| Henry H. Nash..... | 1,011 | 846.2 | 799.0 | 651 | 94.0 | 76.9 |
| Hermann Raster..... | 520 | 426.5 | 395.2 | 349 | 92.7 | 81.8 |
| Hoerner..... | 168 | 115.4 | 105.3 | 101 | 91.3 | 87.5 |
| Holden..... | 2,091 | 1,705.1 | 1,596.4 | 1,333 | 93.6 | 78.2 |
| Holmes..... | 1,560 | 1,343.1 | 1,256.3 | 1,130 | 93.1 | 84.1 |
| Horace Greeley..... | 722 | 649.1 | 609.1 | 512 | 93.8 | 79.0 |
| Horace Mann..... | 825 | 709.3 | 664.8 | 668 | 93.7 | 94.1 |

| SCHOOL. | Enrollment. | Average Daily Mem- bership. | Average Daily At- tendance. | Promotions. | Per Cent of Attendance. | Per Cent of Promotions. |
|-----------------------------|-------------|-----------------------------------|-----------------------------------|-------------|----------------------------|----------------------------|
| Huron Street..... | 728 | 589.2 | 537.3 | 493 | 91.2 | 83.6 |
| Irving..... | 983 | 846.7 | 796.5 | 651 | 94.0 | 76.9 |
| Irving Park..... | 950 | 823.0 | 763.3 | 734 | 92.6 | 89.2 |
| James W. Scott..... | 559 | 455.9 | 428.0 | 435 | 93.6 | 95.3 |
| James R. Doolittle, Jr..... | 1,400 | 1,225.8 | 1,130.5 | 1,037 | 92.2 | 84.6 |
| Jefferson..... | 910 | 756.0 | 714.8 | 703 | 94.5 | 93.0 |
| Jefferson Park..... | 419 | 369.0 | 337.8 | 318 | 91.5 | 86.2 |
| J. L. Marsh..... | 373 | 296.9 | 278.9 | 273 | 93.9 | 91.9 |
| J. N. Thorp..... | 1,083 | 838.0 | 764.7 | 818 | 91.2 | 97.6 |
| John Crerar..... | 877 | 761.6 | 715.0 | 600 | 94.0 | 78.7 |
| John Ericsson..... | 1,143 | 972.1 | 907.5 | 727 | 93.4 | 74.8 |
| John McLaren..... | 1,232 | 1,057.0 | 994.8 | 1,022 | 94.6 | 96.7 |
| †John M. Smyth..... | 81 | 239.2 | 223.1 | 319 | 92.8 | 133.3 |
| Jones..... | 835 | 691.4 | 541.6 | 398 | 90.0 | 66.1 |
| Keith..... | 764 | 608.1 | 554.1 | 463 | 91.1 | 76.1 |
| Kenwood..... | 579 | 485.5 | 448.0 | 443 | 92.3 | 91.2 |
| Kershaw..... | 1,387 | 1,183.8 | 1,111.2 | 850 | 93.7 | 71.8 |
| King..... | 927 | 763.3 | 707.9 | 690 | 92.7 | 90.4 |
| Kinzie..... | 522 | 404.9 | 365.5 | 337 | 90.2 | 83.1 |
| Knickerbocker..... | 1,057 | 926.2 | 880.9 | 764 | 95.1 | 82.5 |
| Komensky..... | 1,042 | 910.8 | 861.1 | 537 | 94.5 | 59.0 |
| Kosciusko..... | 801 | 672.6 | 623.7 | 412 | 92.7 | 61.3 |
| LaFayette..... | 1,468 | 1,281.9 | 1,222.4 | 1,104 | 95.4 | 86.1 |
| Langland..... | 877 | 690.7 | 650.9 | 638 | 94.0 | 92.4 |
| La Salle..... | 1,332 | 1,128.0 | 1,071.1 | 811 | 95.0 | 71.9 |
| Lawndale..... | 781 | 661.7 | 619.2 | 596 | 93.6 | 90.1 |
| Lewis..... | 1,244 | 1,044.6 | 975.4 | 970 | 93.4 | 92.8 |
| Lincoln..... | 1,367 | 1,172.3 | 1,105.7 | 928 | 94.3 | 79.1 |
| Linne..... | 572 | 496.1 | 450.7 | 376 | 90.8 | 75.8 |
| Logan..... | 925 | 823.0 | 772.8 | 708 | 94.0 | 85.4 |
| Longfellow..... | 806 | 698.6 | 658.1 | 504 | 94.2 | 72.1 |
| Louis Nettelhorst..... | 1,207 | 1,074.4 | 1,016.4 | 900 | 94.6 | 83.8 |
| Lowell..... | 1,519 | 1,297.0 | 1,232.8 | 1,161 | 95.0 | 89.5 |
| Lyman Trumbull..... | 59 | 316.5 | 293.7 | 383 | 92.8 | 121.0 |
| Madison Avenue..... | 922 | 800.6 | 743.0 | 696 | 92.8 | 86.9 |
| Madison Street..... | 148 | ..... | ..... | ..... | ..... | ..... |
| Manierre..... | 1,063 | 908.6 | 848.8 | 772 | 93.4 | 85.0 |
| Mark Sheridan..... | 1,070 | 868.9 | 803.9 | 704 | 92.5 | 81.0 |
| Marquette..... | 1,617 | 1,391.6 | 1,320.0 | 1,188 | 94.9 | 85.4 |
| Marshall..... | 818 | 689.0 | 647.5 | 680 | 93.8 | 98.6 |
| McAllister..... | 1,154 | 913.2 | 844.2 | 730 | 92.4 | 80.0 |
| McClellan..... | 1,307 | 1,064.2 | 999.6 | 1,013 | 93.9 | 95.2 |
| McCosh..... | 1,059 | 897.1 | 826.9 | 794 | 91.0 | 88.5 |
| McPherson..... | 799 | 698.5 | 658.1 | 545 | 94.2 | 78.0 |
| Medill..... | 776 | 659.3 | 615.4 | 458 | 93.3 | 69.4 |
| Montefiore..... | 1,300 | 1,036.8 | 963.6 | 703 | 92.8 | 67.8 |
| Morris..... | 1,170 | 997.5 | 944.4 | 756 | 94.6 | 75.8 |
| Moseley..... | 1,412 | 1,132.9 | 1,041.0 | 790 | 91.9 | 69.7 |
| Motley..... | 1,023 | 867.9 | 819.3 | 689 | 94.3 | 79.4 |
| Mulligan..... | 1,214 | 1,043.0 | 987.0 | 832 | 94.6 | 79.8 |
| M. W. Fuller..... | 861 | 732.1 | 683.8 | 601 | 93.4 | 82.1 |
| Myra Bradwell..... | 1,261 | 1,023.5 | 931.3 | 782 | 91.0 | 76.4 |
| Newberry..... | 1,566 | 1,359.0 | 1,291.2 | 1,004 | 95.1 | 73.9 |
| Normal Practice..... | 497 | 408.9 | 385.3 | 328 | 94.0 | 80.2 |
| Norwood Park..... | 185 | 151.5 | 139.5 | 155 | 92.0 | 102.3 |
| Oakland..... | 790 | 649.0 | 596.6 | 540 | 91.8 | 83.2 |
| Oak Ridge..... | 568 | 501.7 | 466.3 | 369 | 92.0 | 73.5 |
| Oak Street..... | 1,010 | 793.2 | 754.9 | 667 | 95.1 | 84.1 |
| Ogden..... | 1,099 | 920.7 | 856.5 | 805 | 93.0 | 87.4 |
| O'Toole..... | 843 | 679.6 | 632.8 | 418 | 94.4 | 62.3 |
| Parkman..... | 1,254 | 1,059.8 | 986.0 | 928 | 93.0 | 87.5 |
| Park Manor..... | 538 | 440.3 | 410.2 | 328 | 93.2 | 74.5 |
| Parkside..... | 597 | 496.0 | 458.9 | 349 | 92.5 | 70.4 |

| SCHOOL. | Enrollment. | Average Daily Mem- bership. | Average Daily At- tendance. | Promotions. | Per Cent of Attendance. | Per Cent of Promotions. |
|---------------------------|-------------|-----------------------------------|-----------------------------------|-------------|----------------------------|----------------------------|
| Peabody..... | 987 | 868.4 | 818.6 | 529 | 94.2 | 60.9 |
| Phil Sheridan | 1,290 | 1,018.9 | 921.1 | 780 | 90.0 | 76.5 |
| Pickard | 1,068 | 961.7 | 903.2 | 769 | 93.9 | 80.0 |
| Polk Street..... | 1,178 | 841.5 | 780.5 | 656 | 92.8 | 77.9 |
| Pre-cott..... | 1,229 | 921.3 | 858.0 | 701 | 93.1 | 76.1 |
| Pulaski..... | 697 | 618.9 | 576.2 | 460 | 93.0 | 74.3 |
| Pullman..... | 1,020 | 882.3 | 826.3 | 785 | 93.6 | 88.9 |
| Ravenswood | 1,046 | 893.2 | 831.7 | 685 | 93.1 | 76.7 |
| Ray..... | 1,089 | 888.6 | 824.7 | 807 | 92.8 | 90.8 |
| Raymond..... | 1,130 | 979.6 | 909.4 | 886 | 92.8 | 90.4 |
| *Richard Yates..... | 1,312 | 1,032.6 | 988.5 | 942 | 95.7 | 91.2 |
| Riverdale..... | 160 | 116.0 | 104.9 | 107 | 90.0 | 92.2 |
| Rogers..... | 931 | 760.8 | 721.7 | 747 | 94.9 | 98.2 |
| Rogers Park..... | 615 | 512.1 | 480.9 | 458 | 93.9 | 89.4 |
| Rose Hill..... | 161 | 127.6 | 116.8 | 109 | 91.5 | 85.4 |
| Ryerson..... | 1,197 | 1,008.0 | 936.5 | 852 | 92.9 | 84.5 |
| Scammon | 1,053 | 797.8 | 731.0 | 601 | 91.6 | 75.3 |
| Scanlan | 616 | 486.3 | 446.2 | 385 | 91.5 | 79.1 |
| Schiller | 1,311 | 1,095.0 | 1,024.1 | 754 | 93.5 | 68.8 |
| Seward..... | 1,197 | 1,031.3 | 954.3 | 838 | 92.5 | 81.2 |
| Sheldon..... | 626 | 507.0 | 474.7 | 469 | 93.0 | 92.5 |
| Sherman..... | 1,452 | 1,216.0 | 1,112.5 | 1,095 | 91.5 | 90.0 |
| Sherwood..... | 1,440 | 1,248.7 | 1,167.2 | 1,113 | 93.4 | 81.1 |
| Shields..... | 678 | 543.1 | 493.4 | 445 | 90.0 | 81.9 |
| Skinner..... | 1,373 | 1,070.3 | 983.0 | 896 | 91.8 | 83.7 |
| Springer..... | 702 | 598.9 | 567.3 | 472 | 94.7 | 78.8 |
| Stony Island Avenue | 217 | 169.3 | 156.7 | 147 | 92.5 | 86.8 |
| Sumner..... | 938 | 820.0 | 766.4 | 776 | 93.5 | 94.6 |
| Talcott..... | 1,203 | 1,000.9 | 931.5 | 865 | 93.0 | 86.4 |
| Taylor | 642 | 546.3 | 509.3 | 418 | 91.4 | 76.5 |
| Tennyson | 901 | 754.0 | 701.6 | 555 | 93.0 | 73.6 |
| Thomas Chalmers..... | 1,431 | 1,121.3 | 1,052.0 | 993 | 93.8 | 88.5 |
| Thomas Hoyne..... | 818 | 650.2 | 600.0 | 467 | 90.7 | 71.8 |
| Throop..... | 1,047 | 925.0 | 880.4 | 910 | 95.2 | 98.4 |
| Tilden..... | 924 | 745.8 | 694.6 | 531 | 93.1 | 71.2 |
| Tilton | 881 | 706.4 | 682.5 | 596 | 96.6 | 84.3 |
| Van Vliissingen..... | 1,051 | 881.8 | 812.3 | 769 | 92.1 | 87.2 |
| Victor F. Lawson..... | 99 | 414.2 | 392.6 | 255 | 94.7 | 61.6 |
| Von Humboldt..... | 1,974 | 1,765.5 | 1,675.4 | 1,766 | 94.9 | 100.0 |
| Walsh..... | 1,555 | 1,280.1 | 1,203.8 | 1,026 | 94.0 | 80.2 |
| Walter Scott | 649 | 532.3 | 487.9 | 473 | 91.6 | 88.8 |
| Ward..... | 783 | 655.3 | 609.2 | 546 | 92.9 | 83.3 |
| Washburne | 1,873 | 1,457.6 | 1,307.6 | 1,001 | 89.7 | 68.7 |
| Washington..... | 1,113 | 963.8 | 899.1 | 812 | 93.3 | 81.2 |
| W. C. Goudy | 607 | 533.1 | 492.1 | 424 | 92.3 | 79.5 |
| Webster..... | 1,021 | 832.6 | 775.2 | 752 | 93.2 | 90.3 |
| Wells..... | 1,856 | 1,579.6 | 1,493.9 | 1,169 | 94.6 | 74.0 |
| West Pullman | 603 | 539.4 | 501.3 | 475 | 92.9 | 88.1 |
| Whittier | 1,287 | 1,046.9 | 1,012.7 | 1,064 | 96.7 | 101.6 |
| Wicker Park | 1,646 | 1,489.0 | 1,424.8 | 1,321 | 95.8 | 88.7 |
| *Wm. Penn Nixon..... | 841 | 692.6 | 632.1 | 530 | 91.2 | 76.5 |
| Woodlawn | 893 | 774.9 | 718.7 | 697 | 92.7 | 89.9 |
| Worthy | 582 | 59.2 | 59.2 | ..... | 100.0 | ..... |
| Yale | 888 | 776.2 | 716.3 | 707 | 92.2 | 91.1 |
| Deaf Mute..... | 113 | ..... | ..... | ..... | ..... | ..... |
| Totals..... | 225,718 | 190,471.5 | 178,192.4 | 156,077 | 93.6 | 81.9 |

* Opened January, 1897.

† Opened April, 1897.

‡ Opened May, 1897.

In Memoriam.

*"Death is another life. We bow our heads
At going out, we think, and enter straight
Another golden chamber of the King's,
Larger than this we leave, and lovelier."*

CHARLES H. FORD,

Principal of the Calhoun School, died January 8, 1897. He was born in Abeiah, Syria, his father being stationed there by the Presbyterian Foreign Missionary Board. His family returned to Geneseo, Ill., when he was nine years old. He graduated from Williams College in 1877. He was a science teacher in the State Normal School at Kirksville, Missouri, for four years, and in the Cook County Normal School for one year. In 1883 he was elected principal of the Calhoun School, where he remained until his death. Mr. Ford was distinguished for his honesty, zeal and energy in all public affairs. He heartily co-operated with citizens in all civic movements for clean streets and alleys, for the enforcement of the laws for public improvements. He never limited his work to the school hours, but was constantly working on new plans which he thought would benefit his school. He devoted much time and money to the collection of a fine

museum from the World's Fair for the Calhoun School, and also secured collections for other schools, which have proved valuable in elementary science study. He watched the construction of the Drainage Canal, taking many photographs of sections, and investigating the evidences of glacial deposits. He had nearly finished a book which he intended to publish for school children, entitled "Footprints of the Ice King."

Mr. Ford had the confidence and esteem of his associates in the Principals' Association; he was trusted by the people, honored by his teachers and loved by his pupils.

JOHN H. TEAR,

Principal of the Washington School, died February 15, 1897. He was born in McLean County, Illinois, in 1855. He began teaching near his home in 1874, and later attended the State Normal School, graduating in 1881. He was principal of the school at Astoria, Illinois, two years, superintendent of schools at Delavan, Illinois, four years, came to Chicago in September, 1887, to become principal of the Humboldt School, was transferred to the Washington School in 1889, where he remained until his death.

Mr. Tear was a student of educational systems and principles. He was practical, and measured the value of all theories by what they would do for children. He was progressive, and tested methods before adopting them. He was honest, earnest, patient, modest, charitable, faithful. His

teachers respected, trusted, honored him. His pupils loved him. His associates in the Principals' Association, in the Institute of Education, in the State Teachers' Association, and in every department of educational work, recognized his stability of character, his untiring energy in his profession, his clear perception of the true ends of education, and his hearty co-operation in all movements for greater efficiency.

His life was an illustration of the motto which he often urged upon his pupils:

*"To be thoroughly in earnest is everything,
To be anything short of it is nothing."*

The following names are recorded upon this page in loving remembrance of their labors and their fellowship. Only Time's eternal record can reveal the good they wrought in the young lives committed to their care:

*"They saw a hand you cannot see,
Which beckoned them away."*

MILLIE WATSON WHITLOCK.

Rogers School, died April 20, 1896.

LU EAVES BARRETT.

Belle Plaine School, died July 17, 1896.

MAUDE CARTER.

Talcott School, died July 23, 1896.

ROSE C. RENNE.

Lowell School, died August 30, 1896.

GRACE E. McCULLOCH.

Blue Island Avenue School, died August 31, 1896.

PUBLIC SCHOOLS.

LYDIA CLAPP.*Emerson School, died September 14, 1896.***HEDWIG BRAUSCH.***Goodrich School, died September, 1896.***ISABEL McLAREN.***Agassiz School, died September, 1896.***EMMA F. DAVIS.***Central Park School, died December 29, 1896.***LIZZIE M. YOUNG.***King School, died March 5, 1897.***LOISE M. FOSKETTE.***Talcott School, died March 6, 1897.***ISABEL FULTON.***Hammond School, died March 8, 1897.***MARY N. NEVILLE.***Hawthorne School, died March 20, 1897.***ELIZABETH EVANS.***Lawndale School, died March 27, 1897.***LAURA KEANE TURNER.***Sheldon School, died May 5, 1897.*

"Life! We've been long together,
 Through pleasant and through cloudy weather;
 'Tis hard to part when friends are dear;
 Perhaps 'twill cost a sigh, a tear,
 Then steal away, give little warning;
 Choose thine own time.
 Say not "Good Night," but in some brighter clime
 Bid me "Good Morning."

REPORTS OF STANDING COMMITTEES.

REPORT OF THE COMMITTEE ON FINANCE.

To the Board of Education of the City of Chicago:

Your Committee on Finance respectfully presents their report, in detail, of the expenditures on account of the Board of Education for the school year ending June 30, 1897, as follows:

SCHOOL TAX FUND.

SALARIES—

| | | |
|--|-----------------------|----------------|
| Superintendents and Teachers. | \$4,044,643 97 | |
| Less amount charged to School Fund and tuition fees..... | \$ 522,643 97 | |
| Less for salaries of teachers of Special Studies | 676,400 51 | |
| | <u>\$1,199,044 48</u> | |
| | | \$2,845,599 49 |
| Office employes | | 57,369 25 |
| Engineers and janitors..... | | 375,329 74 |

SCHOOL SITES—

| | | |
|---|---------------------|--|
| Addition to Ward School lot..... | \$ 1,640 00 | |
| Northwest corner Edgewood avenue and Catalpa place..... | 15,000 00 | |
| Addition to Bryant School lot | 900 00 | |
| Addition to Calhoun School lot..... | 9,000 00 | |
| John M. Smyth School lot (paid Mrs. Ryan for possession of house..... | 300 00 | |
| Addition to Medill School lot..... | 23,475 00 | |
| Northeast corner Ingleside avenue and Fifty-fourth street (two quarterly payments)..... | 875 00 | |
| | <u>\$ 51,190 00</u> | |

NEW BUILDINGS—

| | |
|--|----------------|
| On account of contracts for erection of..... | \$1,003,973 13 |
|--|----------------|

REPORTS OF STANDING COMMITTEES.

INCIDENTAL EXPENSES IN CONNECTION WITH ERECTION OF NEW

BUILDINGS—

| | | | |
|---|----|-----------|--------------|
| Fences and sidewalks..... | \$ | 19,897 23 | |
| Watchmen's services..... | | 8,472 25 | |
| Cleaning buildings and removing rubbish..... | | 926 68 | |
| Heating during process of erection..... | | 6,890 29 | |
| Grading yard, Healy School lot..... | | 280 00 | |
| Curb wall, Phil. Sheridan School lot..... | | 2,790 00 | |
| Iron stairs, J. N. Thorp School building..... | | 600 00 | |
| | | | \$ 39,856 45 |

FURNISHING NEW BUILDINGS—

| | | | |
|----------------------|----|-----------|--------------|
| Seats and desks..... | \$ | 32,330 07 | |
| Chairs..... | | 2,489 34 | |
| Clocks..... | | 178 40 | |
| Bookcases..... | | 4,017 00 | |
| | | | \$ 39,014 81 |

ARCHITECT'S DEPARTMENT—

| | | | |
|---|----|-----------|--------------|
| Salaries of Architect and assistants..... | \$ | 24,623 61 | |
| Draughting supplies..... | | 914 91 | |
| Car fare..... | | 539 00 | |
| Printing..... | | 140 35 | |
| Furniture..... | | 92 30 | |
| Reference books..... | | 275 21 | |
| | | | \$ 26,585 38 |

PERMANENT IMPROVEMENTS—

Wire Window Guards and Hand Rails for the following named School Buildings:

| | | | |
|---------------------|----|--------|-----------|
| Lake High..... | \$ | 100 00 | |
| Agassiz..... | | 35 00 | |
| Carpenter..... | | 25 75 | |
| Columbus..... | | 45 00 | |
| Drummond..... | | 7 00 | |
| Fallon..... | | 3 50 | |
| Hancock..... | | 120 50 | |
| Hermann Raster..... | | 10 00 | |
| Horace Mann..... | | 59 00 | |
| Humboldt..... | | 4 95 | |
| Huron Street..... | | 2 25 | |
| Kinzie..... | | 3 75 | |
| Manierre..... | | 5 00 | |
| Mosley..... | | 13 94 | |
| Mulligan..... | | 94 00 | |
| Prescott..... | | 29 25 | |
| Springer..... | | 31 50 | |
| | | | \$ 590 39 |

Earth Filling and Cindering on the following named School Lots:

| | | | |
|-------------------------|----|--------|--|
| West Division High..... | \$ | 11 25 | |
| Adams..... | | 160 00 | |
| Avondale..... | | 487 20 | |
| Beaubien..... | | 169 75 | |
| Bismarck..... | | 240 00 | |
| Brownell..... | | 5 00 | |
| Burnside..... | | 58 80 | |
| Calumet Avenue..... | | 10 80 | |

| | | |
|-------------------------------|----------|-------------|
| Carter..... | \$ 58 70 | |
| Charles Warrington Earle..... | 299 90 | |
| Cooper..... | 2 50 | |
| D. R. Cameron..... | 320 00 | |
| Drexel..... | 20 00 | |
| Garfield..... | 19 20 | |
| George Schneider..... | 400 00 | |
| Gladstone..... | 45 00 | |
| Gresham..... | 144 40 | |
| Hammond..... | 13 20 | |
| Hartigan..... | 47 75 | |
| Hendricks..... | 29 70 | |
| Henry H. Nash..... | 315 85 | |
| Hermann Raster..... | 30 00 | |
| Horace Greeley..... | 96 25 | |
| John Ericsson..... | 6 00 | |
| John McLaren..... | 11 00 | |
| John M. Smyth..... | 193 32 | |
| J. R. Doolittle..... | 15 00 | |
| King..... | 15 75 | |
| Langland..... | 2 55 | |
| Lawndale..... | 3 00 | |
| Linne..... | 276 60 | |
| Longfellow..... | 15 00 | |
| McClellan..... | 54 00 | |
| M. W. Fuller..... | 12 60 | |
| Morris..... | 115 00 | |
| Nutt Avenue..... | 265 00 | |
| O'Toole..... | 20 00 | |
| Peabody..... | 66 08 | |
| Phil. Sheridan..... | 1,805 68 | |
| Pulaski..... | 844 50 | |
| Richard Yates..... | 600 00 | |
| Sherman..... | 44 00 | |
| Swing..... | 15 00 | |
| Victor F. Lawson..... | 525 10 | |
| Von Humboldt..... | 395 00 | |
| Whittier..... | 34 20 | |
| Wm. Penn Nixon..... | 601 30 | |
| | | \$ 8,920 93 |

*Construction of Water Closets in Connection with
Old Buildings:*

| | | |
|-------------------|-------------|-------------|
| Brighton..... | \$ 1,069 00 | |
| Colman..... | 1,610 00 | |
| Cooper..... | 64 00 | |
| La Salle..... | 1,463 00 | |
| John McLaren..... | 1,473 00 | |
| Ogden..... | 1,426 00 | |
| Sherman..... | 1,285 00 | |
| Taylor..... | 14 70 | |
| Von Humboldt..... | 1,433 00 | |
| | | \$ 9,837 70 |

*Venetian Blinds at the following named School
Buildings:*

| | |
|-------------|----------|
| Farren..... | \$ 12 50 |
|-------------|----------|

| | | | |
|-------------------|----|-------|-----------|
| McPherson..... | \$ | 10 35 | |
| Sumner..... | | 23 00 | |
| Tennyson | | 16 20 | |
| Von Humboldt..... | | 14 58 | |
| Walter Scott..... | | 62 25 | |
| | | | \$ 138 88 |

*Fitting up Additional Rooms in the following
named School Buildings:*

| | | | |
|-------------------------|----|----------|-------------|
| Lake High..... | \$ | 1,560 00 | |
| Lake View High..... | | 382 64 | |
| South Chicago High..... | | 69 00 | |
| Avondale..... | | 354 47 | |
| Belle Plaine..... | | 169 25 | |
| Blaine..... | | 366 39 | |
| Bryant..... | | 98 80 | |
| Carpenter..... | | 1,039 71 | |
| Douglas..... | | 108 15 | |
| D. S. Wentworth..... | | 1,639 00 | |
| George W. Curtis..... | | 410 60 | |
| Hawthorne..... | | 27 40 | |
| Mannierre..... | | 77 50 | |
| Marshall..... | | 233 10 | |
| Prescott..... | | 99 25 | |
| Rogers Park..... | | 251 02 | |
| Swing..... | | 47 25 | |
| Tennyson | | 64 00 | |
| Wicker Park..... | | 107 95 | |
| | | | \$ 7,105 48 |

*Drinking Fountains in Basements of the follow-
ing named School Buildings:*

| | | | |
|----------------------|----|--------|-----------|
| D. S. Wentworth..... | \$ | 132 00 | |
| Scammon | | 224 00 | |
| Wm. P. Nixon..... | | 123 00 | |
| | | | \$ 479 00 |

*Gas Service Pipe and Fixtures in the following
named School Buildings:*

| | | | |
|--|----|--------|--|
| English High and Manual Training | \$ | 39 00 | |
| A. H. Burley | | 171 42 | |
| Bass..... | | 116 75 | |
| Brentano..... | | 48 00 | |
| Burr..... | | 137 89 | |
| Chase | | 106 51 | |
| Franklin | | 266 61 | |
| Garfield | | 60 30 | |
| George Schneider..... | | 152 23 | |
| Goethe | | 102 40 | |
| Graham | | 19 00 | |
| Greenwood Avenue..... | | 178 52 | |
| J. N. Thorpe | | 5 95 | |
| John Crerar..... | | 57 20 | |
| John M. Smyth | | 115 57 | |
| Kozminski | | 246 43 | |
| Marshall | | 208 10 | |
| McClellan | | 84 69 | |

COMMITTEE ON FINANCE.

99

| | | | |
|-----------------------|----|--------|-------------|
| Phil Sheridan | \$ | 51 80 | |
| Polk Street..... | | 14 00 | |
| Richard Yates | | 210 14 | |
| Thomas Chalmers | | 74 00 | |
| Wm. P. Nixon..... | | 14 80 | |
| Supply Room | | 79 00 | |
| | | | \$ 2,560 31 |

Flag Poles at the following named School Buildings:

| | | | |
|---------------------|----|--------|-------------|
| Burroughs..... | \$ | 118 00 | |
| Calhoun..... | | 123 00 | |
| Central Park..... | | 126 00 | |
| Emerson | | 122 00 | |
| Forest Glen | | 38 00 | |
| Hayes | | 125 00 | |
| Hendricks..... | | 125 00 | |
| Madison Avenue..... | | 25 00 | |
| Norwood Park..... | | 118 00 | |
| Ogden..... | | 114 00 | |
| Riverdale | | 58 00 | |
| Seward..... | | 128 00 | |
| Ward..... | | 125 00 | |
| | | | \$ 1,345 00 |

Electric Gongs at the following named School Buildings:

| | | | |
|-----------------------|----|--------|-----------|
| A. H. Burley..... | \$ | 37 50 | |
| D. R. Cameron..... | | 26 00 | |
| D. S. Wentworth..... | | 25 00 | |
| Foster .. | | 29 00 | |
| Franklin | | 102 00 | |
| George Schneider..... | | 30 00 | |
| Goodrich | | 26 00 | |
| Hawthorne..... | | 22 00 | |
| Healy | | 30 00 | |
| H. H. Nash..... | | 29 50 | |
| John M. Smyth..... | | 38 00 | |
| Kozminski | | 39 00 | |
| Marshall | | 52 00 | |
| McClellan | | 29 00 | |
| Medill | | 6 00 | |
| Newberry | | 4 50 | |
| Phil Sheridan..... | | 47 00 | |
| Pickard | | 41 00 | |
| Pulaski..... | | 26 00 | |
| Richard Yates..... | | 41 00 | |
| Talcott..... | | 39 50 | |
| Tilden..... | | 37 50 | |
| Victor F. Lawson..... | | 39 00 | |
| Walter Scott..... | | 29 80 | |
| W. P. Nixon..... | | 22 00 | |
| | | | \$ 848 30 |

Cement Sidewalks at the following named School Buildings:

| | | | |
|---------------|----|----------|-------------|
| Clarke..... | \$ | 1,416 38 | |
| Marshall..... | | 1,204 82 | |
| Ray..... | | 126 62 | |
| | | | \$ 2,747 82 |

*Cement Floors in the following named School**Buildings:*

| | | | |
|-------------------|----|--------|-----------|
| J. L. Marsh..... | \$ | 201 80 | |
| Von Humboldt..... | | 472 95 | |
| | | <hr/> | \$ 674 75 |

*Snow Guards at the following named School**Buildings:*

| | | | |
|--------------------|----|-------|-----------|
| Colman..... | \$ | 44 00 | |
| Knickerbocker..... | | 87 00 | |
| | | <hr/> | \$ 131 00 |

| | |
|--|-----------|
| Fitting up supply room and workshop..... | 11,741 32 |
|--|-----------|

| | |
|--|----------|
| Removing frame building from Pacific School lot to a site on school fund property, near Hanson Park, fitting up same for use as a branch of the Wm. Penn Nixon School..... | 5,024 02 |
|--|----------|

Alterations and Improvements at the following named School Buildings:

| | | | |
|--|----|--------|-------------|
| Manual Training, additional windows..... | \$ | 52 20 | |
| Central Park, coal shed. | | 18 81 | |
| D. S. Wentworth, covered passageway..... | | 10 58 | |
| Forest Glenn, boring well..... | | 62 40 | |
| Goodrich, bath room..... | | 125 00 | |
| Gresham, covered passageway..... | | 22 35 | |
| Holden, iron gates..... | | 110 00 | |
| Humboldt, Principal's office..... | | 75 54 | |
| Newberry, kindergarten..... | | 448 40 | |
| Oak Ridge, kindergarten..... | | 79 99 | |
| Riverdale, outhouses..... | | 42 00 | |
| Scanlan, outhouses..... | | 16 70 | |
| Von Humboldt, kindergarten..... | | 270 66 | |
| Surveying..... | | 410 50 | |
| | | <hr/> | \$ 1,745 13 |

\$ 53,890 03

GENERAL REPAIRS—

| | | | |
|--|----|-----------|--|
| Masonry and brick work..... | \$ | 476 50 | |
| Lathing and plastering..... | | 4,696 78 | |
| Mixed paints, oil, white lead, etc..... | | 3,698 38 | |
| Calclmining..... | | 13,890 60 | |
| Repairing and painting roofs..... | | 4,238 48 | |
| Repairs to iron, tin and sheet metal work..... | | 5,289 10 | |
| Renewal of and relining urinal troughs..... | | 138 67 | |
| Plumbing, sewerage and gas fitting..... | | 9,263 57 | |
| Cleaning water closet vaults..... | | 564 00 | |
| Window glass and putty..... | | 2,281 62 | |
| Blackboards..... | | 2,467 56 | |
| Cleaning buildings..... | | 95 00 | |
| Hardware and nails..... | | 3,925 04 | |
| Lumber for sidewalks, fences, etc..... | | 14,257 36 | |
| Repairing cement floors..... | | 2,124 93 | |
| Sash, doors and mouldings..... | | 283 55 | |
| Carpenters' and laborers' wages..... | | 45,769 58 | |
| Keep and care of horses..... | | 4,792 22 | |
| Whitewashing..... | | 1,954 50 | |
| Repairs to wagons, buggies and harness..... | | 821 40 | |
| Relaying floors of old buildings..... | | 588 06 | |

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| | | |
|--|----|---------------|
| Painting, graining and oiling the interior woodwork of old buildings..... | \$ | 9,429 00 |
| Painting exterior wood, brick, stone and metal work, fences, etc..... | | 4,739 15 |
| Removing ashes and rubbish | | 2,715 46 |
| Fitting up branches..... | | 6,882 13 |
| Delivering lumber, hardware, etc., from supply room to school buildings..... | | 4,084 05 |
| Horses and buggies..... | | 347 50 |
| Restoring rented buildings | | 479 95 |
| Repairing venetian blinds | | 1,361 00 |
| Repairing scales | | 443 01 |
| Repairing flag poles..... | | 344 80 |
| Moving old buildings..... | | 90 00 |
| Rebuilding Irving Park School | | 8,435 00 |
| Removing supplies from burned building | | 761 95 |
| Insurance | | 40 00 |
| Derriek..... | | 50 00 |
| | | <hr/> |
| | | \$ 161,819 90 |

HEATING APPARATUS—

| | | |
|--|----|----------|
| Addition to steam heating apparatus for Everett School building..... | \$ | 2,325 96 |
|--|----|----------|

Heat Regulation in the following named School

Buildings:

| | | |
|---------------------|----|--------|
| Armour Street | \$ | 40 00 |
| Carpenter | | 75 00 |
| Goethe..... | | 50 00 |
| Marshall. | | 125 00 |
| Ravenswood | | 75 00 |
| Tilton | | 195 00 |
| Von Humboldt..... | | 50 00 |
| | | <hr/> |
| | \$ | 610 00 |

Smokeless Furnaces in the following named School

Buildings:

| | | |
|--------------------------|----|----------|
| Hyde Park High | \$ | 500 00 |
| North Division High..... | | 400 00 |
| Cooper | | 450 00 |
| Douglas | | 686 00 |
| Grant..... | | 450 00 |
| Greenwood Avenue | | 400 00 |
| Jefferson | | 450 00 |
| Moseley | | 450 00 |
| Thos. Hoyne | | 500 00 |
| | | <hr/> |
| | \$ | 4,286 00 |

Covering Steam Pipes in the following named

School Buildings:

| | | |
|-------------------------------|----|--------|
| A. H. Burley | \$ | 206 45 |
| Burr..... | | 351 89 |
| Charles Warrington Earle..... | | 133 94 |
| Cornell..... | | 159 49 |
| D. R. Cameron | | 201 99 |
| D. S. Wentworth..... | | 188 76 |
| Everett..... | | 82 36 |
| Foster..... | | 214 55 |
| Franklin | | 394 23 |

| | | |
|---|---------------|--------------|
| George Schneider..... | \$ 182 76 | |
| Goodrich..... | 124 48 | |
| Henry H. Nash..... | 194 72 | |
| J. N. Thorp | 160 81 | |
| John M. Smyth..... | 179 07 | |
| Kozminski | 215 33 | |
| McClellan | 234 40 | |
| Phil Sheridan | 194 45 | |
| Pickard | 199 51 | |
| Pulaski..... | 170 70 | |
| Richard Yates | 246 08 | |
| Scanlan | 177 03 | |
| Tilden..... | 108 73 | |
| Victor F. Lawson | 191 63 | |
| Wm. Penn Nixon | 133 42 | |
| | | \$ 4,646 78 |
| MISCELLANEOUS— | | |
| Ordinary repairs to steam heating apparatus.. | \$ 14,164 60 | |
| Ordinary repairs to furnaces and stoves..... | 5,985 54 | |
| Cut lace gaskets and packing | 740 81 | |
| Engine and cylinder oil..... | 548 76 | |
| Inspecting boilers..... | 1,091 50 | |
| Repairing steam pipe covering | 680 72 | |
| Efflumeters | 100 00 | |
| Repairing heat regulating apparatus..... | 696 75 | |
| | | \$ 24,008 68 |
| | | \$ 35,877 42 |
| APPARATUS AND FURNITURE— | | |
| Renewal of old seats and desks | \$ 8,364 63 | |
| Principal's desks..... | 900 00 | |
| Teachers' tables..... | 1,835 96 | |
| Chairs..... | 1,243 84 | |
| Clocks | 1,346 40 | |
| Repairing and cleaning clocks | 327 90 | |
| Bookcases and wardrobes..... | 2,599 01 | |
| Window shades..... | 1,111 12 | |
| Ink wells and glasses..... | 916 26 | |
| Repairing old furniture..... | 7,647 47 | |
| German teachers' tables..... | 318 50 | |
| Number tables..... | 1,745 60 | |
| Typewriters..... | 183 75 | |
| Labor reseating class rooms..... | 1,868 15 | |
| Model cases..... | 1,994 30 | |
| Amberg files..... | 93 00 | |
| Addressograph "Clerk's office"..... | 200 00 | |
| Gymnasium apparatus | 75 00 | |
| | | \$ 32,770 91 |
| RENTAL OF PROPERTY OCCUPIED FOR SCHOOL PURPOSES— | | |
| School Fund lots..... | \$ 12,292 50 | |
| Rooms and buildings..... | 67,763 84 | |
| Offices of Board of Education..... | 14,849 96 | |
| | | \$ 94,906 30 |
| FUEL— | | |
| <i>Grammar and Primary Schools:</i> | | |
| Soft coal..... | \$ 109,509 07 | |
| Hard coal..... | 34,584 00 | |

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| | | | |
|-------------------------|----|----------|---------------|
| Pine slabs..... | \$ | 2,861 84 | |
| Carrying in coal | | 23 25 | |
| Inspecting scales | | 158 35 | |
| | | | \$ 147,136 51 |

SCHOOL SUPPLIES—

| | | | |
|-----------------------------------|----|-----------|--------------|
| Chalk crayons | \$ | 738 33 | |
| Slate pencils..... | | 679 90 | |
| Lead pencils | | 3,399 66 | |
| Pen holders..... | | 1,225 00 | |
| Pens | | 4,654 00 | |
| Writing paper | | 11,945 77 | |
| Cap paper..... | | 9,436 44 | |
| Note paper | | 287 75 | |
| Ink..... | | 602 65 | |
| Blank books and stationery... | | 432 72 | |
| City directories..... | | 45 00 | |
| Blackboard rubbers..... | | 571 50 | |
| Rent of telephone..... | | 506 55 | |
| Wrapping paper and twine..... | | 618 24 | |
| Insurance..... | | 350 00 | |
| Postage and postal cards..... | | 3,296 80 | |
| Telegram charges..... | | 226 53 | |
| Express charges and car fare..... | | 251 15 | |
| Ribbons for diplomas..... | | 40 00 | |
| Spelling tablets..... | | 5,400 99 | |
| Arithmetic tablets..... | | 5,427 44 | |
| | | | \$ 50,136 42 |

SCHOOL HOUSE SUPPLIES—

| | | | |
|---------------------------------|----|----------|--|
| Floor brushes..... | \$ | 4,471 06 | |
| Corn brooms..... | | 296 40 | |
| Dust brushes..... | | 617 20 | |
| Stove brushes..... | | 6 82 | |
| Feather dusters..... | | 132 12 | |
| Wool dusters..... | | 364 50 | |
| Scrub brushes..... | | 247 25 | |
| Dust pans..... | | 79 80 | |
| Water pails..... | | 144 60 | |
| House savogran and soap..... | | 1,179 25 | |
| Sponges | | 452 94 | |
| Mops and mop handles..... | | 289 92 | |
| Coal hods..... | | 73 50 | |
| Coal scoops..... | | 203 04 | |
| Ash shovels..... | | 14 07 | |
| Common shovels..... | | 38 25 | |
| Snow shovels..... | | 120 00 | |
| Wheel barrows..... | | 122 50 | |
| Rubber hose..... | | 253 23 | |
| Boiler scrapers..... | | 45 00 | |
| Ash hoes..... | | 27 00 | |
| Machine and kerosine oil..... | | 209 56 | |
| Nubian iron enamel..... | | 308 00 | |
| Oil cans..... | | 91 90 | |
| Lanterns, wicks and globes..... | | 222 12 | |
| Hand rakes..... | | 6 74 | |
| Axes and axe handles..... | | 55 00 | |

| | | |
|--|----|-----------|
| Buck saws..... | \$ | 24 45 |
| Hammers | | 22 50 |
| Wrenches | | 70 14 |
| Thermometers | | 67 20 |
| Ink vents..... | | 60 00 |
| Tin cups and chains..... | | 436 32 |
| Picks and handles..... | | 4 30 |
| Window platforms | | 90 00 |
| Window poles..... | | 32 00 |
| Letter boxes..... | | 69 72 |
| Call bells and gongs..... | | 87 43 |
| Stove and metal polish..... | | 36 25 |
| Door mats..... | | 1,102 50 |
| Key rings..... | | 12 74 |
| Gas and connecting meters..... | | 1,553 45 |
| Ice and mineral water for offices..... | | 187 73 |
| Salt and lime..... | | 32 50 |
| Delivering supplies..... | | 874 50 |
| Electric lamps..... | | 22 68 |
| Pad locks..... | | 568 20 |
| Grass seed..... | | 106 00 |
| Police badges..... | | 14 80 |
| Matches and sundries..... | | 16 92 |
| Waste paper baskets..... | | 131 25 |
| Lawn mowers..... | | 83 40 |
| Flags..... | | 832 50 |
| Step ladders..... | | 42 10 |
| Mortar hoes..... | | 82 36 |
| Corks..... | | 15 87 |
| Carpet sweepers..... | | 3 50 |
| Towels, etc | | 136 70 |
| Water, Rogers Park School..... | | 243 00 |
| Stone jugs..... | | 20 43 |
| Oil can boxes..... | | 46 00 |
| Augers | | 48 00 |
| | | <hr/> |
| | \$ | 17,249 21 |

PRINTING AND ADVERTISING—

| | | |
|--|----|-----------|
| Publication of Annual Report..... | \$ | 623 16 |
| Publishing Proceedings of Board..... | | 2,371 51 |
| Miscellaneous printing..... | | 6,296 04 |
| Advertising | | 1,374 52 |
| Engrossing resolutions and testimonials..... | | 130 00 |
| Diplomas..... | | 917 25 |
| | | <hr/> |
| | \$ | 11,712 48 |

EVENING SCHOOLS—

| | | |
|---|----|-----------|
| Teachers' salaries | \$ | 55,394 75 |
| Engineers' and janitors' salaries..... | | 5,306 75 |
| Gas, electric light and kerosene oil..... | | 4,354 70 |
| Fuel..... | | 1,735 80 |
| Printing..... | | 404 60 |
| Posting notices "Opening of Evening Schools"..... | | 75 00 |
| Text books..... | | 123 48 |
| Lamps and fixtures.... | | 4 50 |
| | | <hr/> |
| | \$ | 67,399 58 |

SCHOOL LIBRARIES, ETC.—

| | | |
|---|-------------|--------------|
| Additions to school libraries..... | \$ 2,435 20 | |
| Supplementary readers..... | 16,952 77 | |
| Maps, charts and reference books..... | 1,946 18 | |
| Pianos (from July 1 to December 31, 1896)..... | 1,920 50 | |
| Repairing, tuning and moving pianos (from July 1 to December 31, 1896)..... | 242 15 | |
| Rent (Schiller Theater)..... | 100 00 | |
| Lunch at examination for teachers' certificates..... | 25 00 | |
| Museum (Calhoun School)..... | 500 00 | |
| Rebinding library and reference books..... | 600 83 | |
| | | \$ 24,722 63 |

TEXT BOOKS—

| | |
|---------------------------------|--------------|
| For use of indigent pupils..... | \$ 23,298 31 |
|---------------------------------|--------------|

ANNEXATION—

| | | |
|-----------------------|--------------|--------------|
| Matured bonds..... | \$ 32,870 00 | |
| Interest coupons..... | 38,352 70 | |
| | | \$ 71,222 70 |

COMPULSORY EDUCATION—

| | | |
|---|-------------|--------------|
| Salaries of Superintendent and Clerk..... | \$ 3,579 30 | |
| Salaries of Attendance Agents..... | 11,955 06 | |
| Printing..... | 14 00 | |
| | | \$ 15,548 36 |

HIGH SCHOOLS—

| | | |
|--|---------------|---------------|
| Salaries of Superintendent and teachers..... | \$ 351,235 95 | |
| Salaries of engineers and janitors..... | 22,595 49 | |
| Stenographer and typewriter..... | 720 00 | |
| Fuel..... | 7,056 52 | |
| Gas..... | 570 15 | |
| Reference books, maps, charts, etc..... | 2,333 95 | |
| Repairs to heating apparatus..... | 1,096 73 | |
| Miscellaneous repairs..... | 5,671 67 | |
| Printing..... | 448 48 | |
| Philosophical apparatus..... | 305 39 | |
| Laboratory supplies..... | 1,861 77 | |
| Supplies "Drawing Department"..... | 231 56 | |
| Diplomas..... | 1,388 10 | |
| Tuning pianos..... | 47 60 | |
| Pianos..... | 816 00 | |
| Rebinding books..... | 128 11 | |
| Ink..... | 22 58 | |
| | | \$ 396,530 05 |

ENGLISH HIGH AND MANUAL TRAINING—

| | | |
|---------------------------------------|--------------|--|
| Salaries of teachers..... | \$ 27,749 00 | |
| Salaries of engineer and janitor..... | 1,734 50 | |
| Rent for lot and building..... | 5,637 34 | |
| Fuel..... | 610 38 | |
| Gas..... | 132 40 | |
| Cases, tables, etc..... | 1,142 88 | |
| Tools and machinery..... | 8,053 72 | |
| Shop supplies..... | 2,462 06 | |
| Philosophical apparatus..... | 140 96 | |
| Laboratory supplies..... | 100 28 | |

| | | | |
|--|----|----------|--------------|
| Reference books, maps, charts, etc..... | \$ | 20 60 | |
| Drawing paper, ink, etc..... | | 286 30 | |
| Printing..... | | 119 47 | |
| Insurance..... | | 600 00 | |
| Electric power..... | | 174 19 | |
| Repairing heating apparatus..... | | 524 82 | |
| Miscellaneous repairs..... | | 508 81 | |
| Fitting up new building..... | | 5,284 12 | |
| Moving, repairing, storing, etc., machinery..... | | 1,500 00 | |
| | | | \$ 56,801 83 |

MANUAL TRAINING AT THE HOUSE OF CORRECTION—

| | | | |
|---------------------------|----|----------|--------------|
| Salaries of teachers..... | \$ | 5,297 00 | |
| Salaries of engineer..... | | 1,595 00 | |
| Tools and machinery..... | | 4,672 87 | |
| Shop supplies..... | | 806 87 | |
| Fuel..... | | 501 24 | |
| Text books, etc..... | | 52 70 | |
| Fitting up building..... | | 713 74 | |
| Earth filling..... | | 114 00 | |
| Typewriter..... | | 70 00 | |
| | | | \$ 13,823 42 |

MANUAL TRAINING IN GRAMMAR SCHOOLS—

| | | | |
|---------------------------|----|-----------|--------------|
| Salaries of teachers..... | \$ | 15,224 00 | |
| Tools and machinery..... | | 3,299 69 | |
| Shop supplies..... | | 3,696 20 | |
| | | | \$ 22,219 89 |

NORMAL SCHOOL—

| | | | |
|---|----|-----------|--------------|
| Salaries of teachers, Normal..... | \$ | 32,236 50 | |
| Salaries of teachers, Normal Practice..... | | 11,221 25 | |
| Salaries of engineer and janitor..... | | 2,661 15 | |
| Fuel..... | | 1,322 99 | |
| Gas..... | | 105 40 | |
| Rent..... | | 1,751 73 | |
| Reference books, etc..... | | 1,588 63 | |
| Miscellaneous repairs..... | | 3,517 85 | |
| Printing department..... | | 1,272 90 | |
| School supplies..... | | 444 85 | |
| Kindergarten supplies..... | | 66 50 | |
| Laboratory supplies..... | | 120 83 | |
| Manual training supplies..... | | 179 55 | |
| Philosophical apparatus..... | | 649 55 | |
| Document files, desks, chairs, etc..... | | 574 41 | |
| Metallic shelves, stairway and balcony..... | | 1,104 60 | |
| Lunch, "teachers examination"..... | | 30 00 | |
| Telephone..... | | 41 30 | |
| Sprinkling..... | | 60 00 | |
| Surveying..... | | 24 00 | |
| Benches, tools, etc., Manual Training Department..... | | 179 12 | |
| Care of school grounds..... | | 218 13 | |
| | | | \$ 59,371 24 |

Music—

| | | | |
|----------------------------------|----|-----------|--|
| Salaries of teachers..... | \$ | 21,329 25 | |
| Stenographer and typewriter..... | | 360 00 | |
| Music readers..... | | 3,748 40 | |

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| | | | |
|---|----|--------|--------------|
| Music charts | \$ | 82 00 | |
| School songs | | 110 45 | |
| Printing | | 70 15 | |
| Repairing, tuning and moving pianos, (January 1 to June 30, 1897). | | 198 45 | |
| Rent pianos from January 1 to June 30, 1897..... | | 127 00 | |
| | | | \$ 26,025 70 |

DRAWING—

| | | | |
|----------------------------------|----|-----------|--------------|
| Salaries of teachers..... | \$ | 17,324 00 | |
| Stenographer and typewriter..... | | 360 00 | |
| Drawing paper..... | | 5,511 30 | |
| Models and studies | | 944 87 | |
| Drawing books | | 296 02 | |
| Lead pencils | | 4,674 34 | |
| Colored pencils | | 547 50 | |
| Envelopes..... | | 120 00 | |
| Baskets | | 37 25 | |
| Scissors | | 476 54 | |
| Colored tablets..... | | 1,240 00 | |
| Mounting board..... | | 886 80 | |
| Glue..... | | 32 00 | |
| Fixatif | | 147 00 | |
| Plants..... | | 8 54 | |
| Picture hooks..... | | 33 20 | |
| Printing..... | | 279 13 | |
| | | | \$ 32,868 49 |

PHYSICAL CULTURE—

| | | | |
|---------------------------------------|----|-----------|--------------|
| Salaries of teachers..... | \$ | 10,134 25 | |
| Wands | | 164 27 | |
| Wand racks..... | | 147 65 | |
| Indian clubs and dumb bells..... | | 660 00 | |
| Indian clubs and dumb bell racks..... | | 253 65 | |
| Gymnasium, Franklin School..... | | 553 50 | |
| Printing..... | | 204 12 | |
| | | | \$ 12,117 44 |

GERMAN—

| | | | |
|---------------------------|----|------------|---------------|
| Salaries of teachers..... | \$ | 135,167 68 | |
| Text books..... | | 1,630 50 | |
| Printing..... | | 209 83 | |
| | | | \$ 137,008 01 |

KINDERGARTENS—

| | | | |
|-----------------------------------|----|-----------|--------------|
| Salaries of teachers..... | \$ | 39,085 88 | |
| Supplies..... | | 3,110 39 | |
| Pianos..... | | 3,003 50 | |
| Tuning and repairing pianos | | 124 40 | |
| | | | \$ 45,324 17 |

DEAF MUTE SCHOOLS—

| | | | |
|----------------------------|----|-----------|--------------|
| Salaries of teachers..... | \$ | 10,395 75 | |
| Salary of janitor..... | | 420 00 | |
| Fuel..... | | 23 62 | |
| Text books, maps, etc..... | | 42 70 | |
| | | | \$ 10,882 07 |

LEGAL EXPENSES—

| | | | |
|---|----|--------|--|
| Abstracts of title, court costs, etc..... | \$ | 609 30 | |
|---|----|--------|--|

SCHOOL CENSUS—

From July 1 to December 31, 1896:

| | | |
|--|-------------|-------------|
| Superintendent and clerks' salaries..... | \$ 2,636 50 | |
| Salaries of canvassers..... | 393 00 | |
| Printing..... | 165 77 | |
| | | \$ 3,195 27 |

CONTINGENT FUND—

| | | |
|-----------------------------|-------------|-------------|
| Vaccinating... .. | \$ 2,400 00 | |
| Surgeons' fees..... | 62 00 | |
| Engrossing resolutions..... | 350 00 | |
| Tuition, Morgan Park.... | 32 00 | |
| | | \$ 2,844 00 |

SPECIAL ASSESSMENTS—

| | | |
|---|-------------|--|
| Curbing, filling and paving system of streets, Chase School lot..... | \$ 2,080 21 | |
| Curbing, filling and paving Moore street, Whittier School lot..... | 544 62 | |
| Curbing, filling and paving Lincoln street, Brighton School lot..... | 425 99 | |
| Curbing, filling and paving North Fifty-ninth street, Andersonville School lot..... | 884 98 | |
| Curbing, filling and paving Moore street, Whittier School lot..... | 940 29 | |
| Curbing, filling and paving Keeney avenue, Keeney Avenue vacant lot..... | 843 70 | |
| Curbing, filling and paving Francisco street, John Ericsson School lot..... | 43 10 | |
| Curbing and filling Grace street, Blaine School lot..... | 324 10 | |
| Curbing and paving Lunt avenue, Rogers Park Branch School lot..... | 556 16 | |
| Curbing, grading and paving Fall street, Warren Avenue vacant lot..... | 369 80 | |
| Curbing, grading and paving Diversey avenue, Avondale Branch School lot..... | 810 33 | |
| Curbing, grading and paving Atlantic street, Parkman School lot..... | 4 38 | |
| Curling, grading and paving Twenty-fourth street, Moseley School lot..... | 678 67 | |
| Curbing, grading and paving Congress street, West Division High School lot..... | 73 32 | |
| Grading and paving Warren avenue, Brown School lot.... | 282 92 | |
| Curbing, grading and filling Lunt avenue, Rogers Park School lot..... | 7 48 | |
| Curbing, grading and macadamizing Champlain avenue, McCosh School lot..... | 824 34 | |
| Curling, grading and macadamizing Madison avenue, Madison Avenue School lot..... | 1,182 71 | |
| Water service pipes in West Thirteenth street, Doran School lot..... | 42 78 | |
| Water service pipes in West Taylor street, John Crerar School lot..... | 5 18 | |
| Water service pipes in North Troy street, Elston Road School lot..... | 58 93 | |
| Water service pipes in Ninety-third street, Stony Island School lot..... | 6 28 | |
| Water service pipes in Sixty-first street, Carter School lot.. | 50 18 | |

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| | |
|--|----------------|
| Water service pipes in Western avenue, Forest Hill School lot..... | \$ 66 28 |
| Water service pipes in Moore street, Whittier School lot.... | 99 94 |
| Water service pipes in Ashland avenue, Andersonville School lot..... | 41 18 |
| Water service pipes in N. 41st court, Beaubien School lot.... | 208 64 |
| System of sewers in sundry streets, Rogers Park School lot | 6 16 |
| Sewer in West Huron street, Ryerson School lot..... | 13 94 |
| Sewer in West Taylor street, John Crerar School lot..... | 8 07 |
| Sewer in Seipp avenue, Parkside School lot..... | 183 78 |
| Sewer in Leavitt street, Leavitt street vacant lot..... | 310 05 |
| Sewer in Hirsch street, Lowell School lot..... | 245 74 |
| Sewer in Champlain avenue, McCosh School lot..... | 474 57 |
| Drains in Escanaba avenue, Phil. Sheridan School lot | 145 44 |
| Cement sidewalk on Princeton avenue, Sherwood School lot | 14 48 |
| Cement sidewalk on Eda street, Raymond School lot | 218 61 |
| Cement sidewalk on Princeton avenue, Englewood High School lot..... | 12 28 |
| Cement sidewalk on Milwaukee avenue, Avondale School lot | 8 96 |
| Cement sidewalk on Greenleaf avenue, Rogers Park School lot | 8 18 |
| Cement sidewalk on Monroe avenue, J. W. Scott School lot | 7 23 |
| Cement sidewalk on Kimbark avenue, Hyde Park High School lot..... | 12 78 |
| Plank sidewalk on Avenue J, Taylor School lot..... | 3 16 |
| Lamp posts on Austin avenue, Amerson School lot..... | 15 61 |
| Lamp posts on North Forty-fourth street, Tilton School lot. | 40 21 |
| Lamp posts on Lake street, Tilton School lot..... | 51 28 |
| Lamp posts on Point street, Chase School lot..... | 46 86 |
| Lamp posts on Fifty-fourth street, J. W. Scott School lot.. | 29 83 |
| Lamp posts on Atlantic avenue, Sherwood School lot..... | 25 37 |
| Lamp posts on Princeton avenue, Englewood High School lot..... | 7 56 |
| Lamp posts on Rhodes avenue, Park Manor School lot..... | 52 77 |
| Lamp posts on Washburne avenue, Gladstone School lot ... | 32 16 |
| Lamp posts on Yorktown street, Everett School lot..... | 50 64 |
| Lamp posts on N. 59th street, Andersonville School lot.... | 50 93 |
| Lamp posts on N. 59th street, W. C. Goudy School lot..... | 22 83 |
| Lamp posts on Paulina street, Hamilton School lot..... | 29 33 |
| Lamp posts on School street, Hawthorne School lot..... | 30 14 |
| Lamp posts on Sheldon street, Blaine School lot..... | 48 59 |
| Lamp posts on Grace street, Blaine School lot..... | 20 10 |
| Lamp posts on Greenleaf avenue, Rogers Park School lot.. | 30 14 |
| Lamp posts on Arnold avenue, Rogers Park School lot..... | 26 62 |
| Lamp posts on Arnold avenue, Rogers Park Branch School lot..... | 48 80 |
| Lamp posts on Ninety-third street, Bowen School lot..... | 24 61 |
| Lamp posts on Thirty-fifth street, Brighton School lot..... | 61 64 |
| Lamp posts on Lincoln street, Brighton School lot..... | 14 82 |
| Lamp posts on Champlain avenue, McCosh School lot | 45 18 |
| Lamp posts on school walk, Englewood High School lot.. | 231 41 |
| General Taxes, 1888..... | 20 16 |
| | <hr/> |
| | \$ 14,197 51 |
| Total Expenditures on Account of School Tax Fund..... | <hr/> |
| | \$6,080,427 40 |

SCHOOL FUND.

Your Committee has audited the receipts and expenditures on account of the School Fund for the year ending June 30 1897, which are as follows:

INVESTMENT ACCOUNT.

RECEIPTS.

| | | |
|---|----|----------|
| Cash on hand for investment June 30, 1896. | \$ | 258 35 |
| One per cent of six months' interest on \$5,000 City of Chicago 7 per cent bonds in liquidation of premium paid thereon | | 25 00 |
| Four City of Chicago water certificates, Nos. 202, 203, 204, 205, face value \$1,000 each, paid. | | 4,000 00 |
| Three City of Chicago water certificates, Nos. 428, 429, 430, face value \$500 each, paid. | | 1,500 00 |
| August Goetze's mortgage note paid. | | 1,000 00 |
| F. W. Harrison's mortgage note paid. | | 900 00 |
| Sarah E. Burhans' mortgage note, on account. | | 200 00 |
| Nathaniel Dearborn's mortgage note paid. | | 400 00 |
| | \$ | 8,283 35 |

EXPENDITURES.

| | | |
|---|----|----------|
| Cash on hand for investment June 30, 1897. | \$ | 8,283 35 |
|---|----|----------|

INCOME ACCOUNT.

RECEIPTS.

| | | |
|---|----|--------------|
| Cash on hand June 30, 1896. | \$ | 30,360 85 |
| <i>Rentals—</i> | | |
| Of School Fund property. | | 468,482 18 |
| <i>State School Tax—</i> | | |
| Total for 1896. | | 280,049 53 |
| <i>Interest on Investments—</i> | | |
| City of Chicago bonds. | \$ | 4,892 25 |
| Mortgage loans. | | 36,377 92 |
| | \$ | 41,270 17 |
| <i>Miscellaneous—</i> | | |
| Tuition fees of non-resident pupils. | | 2,469 75 |
| Rebates on special assessments. | | 152 02 |
| Court costs refunded. | | 24 30 |
| Correction in teachers' pay rolls. | | 125 18 |
| <i>School Tax Fund—</i> | | |
| Amount transferred to pay teachers. | | 3,522,000 00 |
| | \$ | 4,344,933 98 |

EXPENDITURES.

| | | |
|--|----|--------------|
| <i>Salaries—</i> | | |
| Superintendents and teachers. | \$ | 4,044,643 97 |
| <i>Special Assessments—</i> | | |
| Sewer in Wentworth avenue. | \$ | 7 73 |
| System of sewers. | | 21 67 |
| Curbing, grading and paving Le Moyne street. . | | 241 27 |
| Water supply pipe in Armitage avenue. | | 1,017 78 |
| Water supply pipe in Grand avenue. | | 1,300 58 |
| Water supply pipe in North Robey street. | | 348 08 |
| | \$ | 2,937 11 |

Miscellaneous—

| | | | |
|---|----|------------|-----------------------|
| Rent of box in National Safety Deposit Vault. | \$ | 30 00 | |
| Margaret O'Donoghue, dower in Barker lot.... | | 75 00 | |
| Appraisal of school property in District 4, T. 41 N., R. 14..... | | 40 00 | |
| Abstract of title..... | | 31 50 | |
| Court costs..... | | 164 11 | |
| Insurance, "Foot" property..... | | 7 50 | |
| Insurance, "Bartlett" property..... | | 4 50 | |
| | \$ | 352 61 | |
| Cash on hand in City Treasury June 30, 1897.. | | 297,000 29 | |
| | | | <u>\$1,344.933 98</u> |

INVESTMENT OF PRINCIPAL.

Your Committee also reports that, in accordance with their duties as prescribed in Section II of the Rules and Regulations of the Board, they have examined the securities in the hands of the School Agent, representing the investment of the School Fund, and found them to agree with the record of the Fund kept in the office of the Board.

| | |
|---|---------------|
| Amount of School Fund Principal June 29, 1896.... | \$ 979,789 19 |
| Accretions to Fund, none. | |
| Amount of School Fund Principal June 30, 1897.... | 979,789 19 |

INVESTED AS FOLLOWS:

Bonds and Certificates—

| | | |
|---|----|------------|
| 6 City of Chicago 7 per cent bonds..... | \$ | 6,000 00 |
| 34 City of Chicago 4½ per cent bonds..... | | 11,950 00 |
| 335 City of Chicago 4 per cent bonds..... | | 175,500 00 |
| 15 City of Chicago 3.65 per cent bonds..... | | 1,500 00 |
| 24 City of Chicago 3½ per cent bonds..... | | 23,000 00 |
| 16 Hyde Park 4½ per cent School Bonds..... | | 16,000 00 |

Total bonds and certificates..... \$ 233,950 00

Promissory Notes..... 250 00

Mortgage Notes—

| | |
|--|---------------|
| John P. Neal and the Great Western Railroad Company, due May 1, 1898, interest 5 per cent.. | \$ 650,000 00 |
| James A. McCauley and Clifford A. Lake, due March 1, 1897, interest 6 per cent..... | 3,750 00 |
| James A. McCauley and Clifford A. Lake, due March 1, 1897, interest 6 per cent..... | 3,750 00 |
| Charles C. Housel, due December 18, 1901, inter- est 6 per cent..... | 5,000 00 |
| Carl C. Lindquist, due March 22, 1899, interest 6 per cent..... | 8,500 00 |
| Brita Helena Billings, due March 15, 1899, inter- est 6 per cent..... | 9,000 00 |

| | |
|---|---------------|
| Orren V. Stookey, due June 21, 1897, interest 6½ per cent..... | \$ 3,500 00 |
| Sarah E. Burhans, due September 7, 1897, interest 6 per cent.... | 1,900 00 |
| Minnie W. Bowen, due October 1, 1897, interest 6 per cent..... | 7,500 00 |
| Charles E. Stacey, due December 1, 1897, interest 6 per cent..... | 500 00 |
| A. B. Stevens, due November 12, 1897, interest 6 per cent..... | 1,500 00 |
| Henry Rosier, due September 16, 1899, interest 6 per cent..... | 1,500 00 |
| Joseph McConnell, due September 16, 1897, interest 6 per cent..... | 350 00 |
| Alice Smith, due November 28, 1897, interest 6 per cent..... | 1,600 00 |
| Otto F. Schennemann, due May 29, 1898, interest 6 per cent..... | 5,000 00 |
| James B. and Charles Garner, due January 22, 1900, interest 6 per cent..... | 4,500 00 |
| Henry Altman, due August 27, 1900, interest 6 per cent..... | 8,000 00 |
| Ole J. I. Bodahl, due September 30, 1900, interest 6 per cent..... | 2,000 00 |
| Total Mortgage Notes..... | \$ 717,850 00 |

Real Estate—

| | |
|---|-------------|
| The "J. N. Barker Lot," being the S. 10 feet of Sub Lot 3, and the N. 10 feet of Sub Lot 4 of Lots 7 and 10, in Block 2, Fractional Section 15 Add., taken in foreclosure of mortgage..... | \$ 3,000 00 |
| The "Busby Lot," being the N. ½ of Lot 14, in Block 60, of Russell, Mather & Roberts' Add. to Chicago, taken in foreclosure of mortgage..... | 850 00 |
| The "Hegewisch Property," being Lot 5, in Block 10, in Adolph Hegewisch's Subdivision of part of S. ½ of Section 31, Township 37 North, Range 15 East of 3d P. M., acquired by annexation of part of Township 37 N., R. 14 E. | 1,500 00 |
| The "Bartlett Property," being Lots 55 and 56, in Block 4, in Hough & Reed's Add. to Washington Heights, acquired by annexation of part of Township 37 N., R. 14 E..... | 400 00 |
| The "Foot Property," being Lots 2, 3, 4 and 24, in Block 1, in Norwood Park, a Sub. in Section 6, 40, 13, taken in foreclosure of mortgage..... | 2,000 00 |
| The "Millen Property," being the N. ½ of Lot 7, in Block 2, in Hilliard & Hill's Subdivision, in the N. W. ¼, Section 17, 37, 14, taken in foreclosure of mortgage..... | 200 00 |
| Total Real Estate..... | \$ 7,950 00 |
| Premium on bonds purchased..... | 11,505 84 |
| Cash on hand for investment June 30, 1897..... | 8,283 35 |

\$ 979,789 19

SPECIAL FUNDS.

Your Committee has also audited the receipts and expenditures on account of the various Special Funds, held in trust by the School Agent, for the year ending June 30, 1897, as follows:

| RECEIPTS. | | |
|--|----|-------------|
| Cash on hand June 30, 1896..... | | \$ 1,756 51 |
| <i>Interest on Principal Invested on Account of—</i> | | |
| George Howland Fund..... | \$ | 35 00 |
| Carpenter Fund..... | | 20 00 |
| Michael Reese Fund..... | | 40 00 |
| Moseley Book Fund..... | | 242 50 |
| Newberry Fund..... | | 20 00 |
| W. K. Sullivan Fund..... | | 6 00 |
| Holden Fund..... | | 3 00 |
| *Sheldon Fund..... | | 50 00 |
| Jones Fund..... | | 60 00 |
| Foster Medal Fund..... | | 160 00 |
| Perkins Bass Fund..... | | 111 00 |
| Calhoun Fund..... | | 11 00 |
| | \$ | 758 50 |
| | | \$ 2,515 01 |
| EXPENDITURES. | | |
| Carpenter Fund..... | \$ | 70 73 |
| Michael Reese Fund..... | | 79 80 |
| Moseley Book Fund..... | | 380 62 |
| Newberry Fund..... | | 26 65 |
| Sheldon Fund..... | | 121 15 |
| Jones Fund..... | | 63 58 |
| Foster Medal Fund..... | | 263 40 |
| Taylor Fund..... | | 34 |
| Hesing German Fund..... | | 16 65 |
| Perkins Bass Fund..... | | 488 94 |
| Calhoun Fund..... | | 15 49 |
| | \$ | 1,527 35 |
| Foster Medal Fund—Amount unexpended December 31, 1896, transferred to principal of fund..... | \$ | 59 88 |
| Cash in hands of School Agent June 30, 1897.... | | 927 78 |
| | | \$ 2,515 01 |

INVESTMENT OF SPECIAL FUNDS.

Your Committee also reports that they have examined and found correct the securities in the hands of the School Agent, representing the principals of the Special Funds invested as follows:

| | | |
|---|----|----------|
| Carpenter Fund, City of Chicago 4 per cent bonds. | \$ | 1,000 00 |
| Newberry Fund, City of Chicago 4 per cent bonds. | | 1,000 00 |

| | | |
|---|--------------|--------------|
| Michael Reese Fund, City of Chicago 4 per cent bonds..... | | \$ 2,000 00 |
| W. K. Sullivan Fund, City of Chicago 4 per cent bonds..... | | 300 00 |
| Holden Fund, City of Chicago 4 per cent bonds.... | | 150 00 |
| Sheldon Fund, City of Chicago 4 per cent bonds... | | 2,500 00 |
| Calhoun Fund, City of Chicago 4 per cent bonds... | \$ 100 00 | |
| City Railway 4½ per cent bonds..... | 400 00 | |
| | <hr/> | \$ 500 00 |
| Moseley Book Fund, City of Chicago 3.65 per cent bonds..... | \$ 10,000 00 | |
| Six per cent mortgage note..... | 1,000 00 | |
| | <hr/> | \$ 11,000 00 |
| Foster Medal Fund, 6 per cent mortgage notes.... | | 5,000 00 |
| Jones Fund, 6 per cent mortgage note..... | | 1,000 00 |
| George Howland Fund, 7 per cent mortgage note.. | | 1,000 00 |
| Perkins Bass Fund, 6 per cent mortgage note..... | | 1,850 00 |
| | <hr/> | <hr/> |
| Total amount invested..... | | \$ 27,300 00 |

JONATHAN BURR FUND.

Your Committee submits the following statement of the receipts and expenditures on account of the Jonathan Burr Fund, held in trust by the City Comptroller for the use of schools, for the year ending June 30, 1897:

RECEIPTS.

| | | |
|--|----------|-------------|
| Cash on hand in City Treasury June 30, 1896..... | | \$ 2,263 49 |
| Six months interest on principal invested, as follows: | | |
| \$ 2,000 in City of Chicago 6 per cent bonds..... | \$ 60 00 | |
| 14,700 in City of Chicago 4 per cent bonds..... | 294 00 | |
| 500 in City of Chicago 3 65 per cent bonds..... | 9 12 | |
| 500 in Cook County 4 per cent bonds..... | 10 00 | |
| | <hr/> | \$ 373 12 |
| | | <hr/> |
| | | \$ 2,636 61 |

EXPENDITURES.

| | | |
|--|-----------|-------------|
| Erroneous credit of interest in 1896..... | \$ 360 00 | |
| Text books for indigent pupils..... | 2,183 68 | |
| Cash on hand in City Treasury June 30, 1897..... | 92 93 | |
| | <hr/> | \$ 2,636 61 |

Your Committee also submits a statement of the amount now invested on account of principal of the Jonathan Burr Fund, the revenue of which is applicable to the purchase of

books of reference, apparatus, works of art, text books, etc.,
for the use of schools:

Amount of principal of Jonathan Burr Fund, for use of
schools, as per last report..... \$ 32,700 00

Principal of Fund June 30, 1897..... \$ 32,700 00

Invested as follows—

| | |
|--|--------------------------|
| Eight City of Chicago 7 per cent bonds..... | \$ 8,000 00 |
| Two City of Chicago 6 per cent bonds..... | 2,000 00 |
| Fourteen City of Chicago 4 per cent bonds..... | 6,700 00 |
| One City of Chicago 3.65 per cent bond..... | 500 00 |
| Twenty-one Cook County 5 per cent bonds..... | 15,000 00 |
| One Cook County 4 per cent bond..... | 500 00 |
| | <hr/> \$ 32,700 00 <hr/> |

STATEMENT OF BONDED INDEBTEDNESS OF SUNDRY ANNEXED SCHOOL DISTRICTS ASSUMED
BY THE CITY OF CHICAGO, AND OUTSTANDING JUNE 30, 1897.

| Dis. | T. R. | Bonds. | Due. | Int. Coupons. | Payable. | Int. per cent |
|------|--------|----------|-------------------|---------------|--------------|---------------|
| 5 | 37, 14 | \$ 1,000 | March 10, 1898 | March 10, | September 10 | 6 |
| | | 1,000 | " 10, 1899 | " 10, | " 10 | 6 |
| | | 1,000 | " 10, 1900 | " 10, | " 10 | 6 |
| | | 800 | " 10, 1901 | " 10, | " 10 | 6 |
| 7 | 37, 14 | 6,000 | August 1, 1899 | February 1, | August 1 | 5 |
| | | 6,000 | June 1, 1900 | June 1, | December 1 | 5 |
| 1 | 37, 15 | 20,000 | February 1, 1907 | February 1, | August 1 | 5 |
| | | 35,000 | August 1, 1908 | " 1, | " 1 | 5 |
| 6 | 38, 13 | 7,000 | October 1, 1898 | April 1, | October 1 | 5 |
| 1 | 38, 14 | 10,000 | July 1, 1898 | January 1, | July 1 | 5 |
| | | 10,000 | " 1, 1899 | " 1, | " 1 | 5 |
| | | 10,000 | " 1, 1900 | " 1, | " 1 | 5 |
| | | 10,000 | " 1, 1901 | " 1, | " 1 | 5 |
| | | 10,000 | " 1, 1902 | " 1, | " 1 | 5 |
| | | 5,000 | " 1, 1898 | " 1, | " 1 | 4½ |
| | | 5,000 | " 1, 1899 | " 1, | " 1 | 4½ |
| | | 5,000 | " 1, 1900 | " 1, | " 1 | 4½ |
| | | 5,000 | " 1, 1901 | " 1, | " 1 | 4½ |
| | | 5,000 | " 1, 1902 | " 1, | " 1 | 4½ |
| | | 15,000 | " 1, 1903 | " 1, | " 1 | 4½ |
| | | 15,000 | " 1, 1904 | " 1, | " 1 | 4½ |
| | | 15,000 | " 1, 1905 | " 1, | " 1 | 4½ |
| | | 15,000 | " 1, 1906 | " 1, | " 1 | 4½ |
| | | 15,000 | " 1, 1907 | " 1, | " 1 | 4½ |
| 2 | 38, 14 | 50,000 | August 1, 1897 | February 1, | August 1 | 7 |
| | | 15,000 | September 1, 1899 | March 1, | September 1 | 5 |
| | | 15,000 | " 1, 1900 | " 1, | " 1 | 5 |
| | | 15,000 | " 1, 1901 | " 1, | " 1 | 5 |
| | | 15,000 | " 1, 1902 | " 1, | " 1 | 5 |
| | | 15,000 | " 1, 1903 | " 1, | " 1 | 5 |
| | | 15,000 | " 1, 1904 | " 1, | " 1 | 5 |
| | | 15,000 | " 1, 1905 | " 1, | " 1 | 5 |

| Dis. | T. R. | Bonds. | Due. | Int. Coupons. | Payable. | Int. per cent |
|---|--------|----------|-------------------|---------------|-------------|---------------|
| 2 | 38, 14 | \$15,000 | September 1, 1906 | March 1, | September 1 | 5 |
| | | 15,000 | " 1, 1907 | " 1, | " 1 | 5 |
| | | 15,000 | " 1, 1908 | " 1, | " 1 | 5 |
| 4 | 38, 14 | 1,500 | February 1, 1898 | February 1, | August 1 | 5 |
| | | 2,000 | " 1, 1899 | " 1, | " 1 | 5 |
| | | 2,000 | " 1, 1900 | " 1, | " 1 | 5 |
| | | 2,000 | " 1, 1901 | " 1, | " 1 | 5 |
| | | 2,000 | " 1, 1902 | " 1, | " 1 | 5 |
| 5 | 38, 14 | 1,000 | January 1, 1898 | January 1, | July 1 | 5 |
| | | 1,000 | " 1, 1899 | " 1, | " 1 | 5 |
| 6 | 38, 14 | 11,000 | June 1, 1900 | June 1, | December 1 | 7 |
| 10 | 38, 14 | 40,000 | " 1, 1898 | " 1, | " 1 | 5 |
| | | 41,000 | " 1, 1903 | " 1, | " 1 | 5 |
| | | 41,000 | " 1, 1908 | " 1, | " 1 | 5 |
| 11 | 40, 13 | 3,500 | November 1, 1900 | May 1, | November 1 | 6 |
| | | 3,000 | May 1, 1902 | " 1, | " 1 | 5 |
| 1 | 40, 14 | 500 | September 1, 1899 | ..... | ..... | 6 |
| | | 30,000 | " 1, 1902 | March 1, | September 1 | 5 |
| | | 30,000 } | " 1, 1892 } | " 1, | " 1 | 5 |
| | | | " 1, 1902 } | " 1, | " 1 | 5 |
| | | 40,000 | " 1, 1906 | " 1, | " 1 | 5 |
| 2 | 40, 14 | 2,000 | July 1, 1898 | January 1, | July 1 | 5 |
| | | 1,500 | " 1, 1899 | " 1, | " 1 | 5 |
| 3 | 40, 14 | 1,000 | " 1, 1898 | " 1, | " 1 | 5 |
| | | 1,000 | " 1, 1899 | " 1, | " 1 | 5 |
| | | 1,000 | " 1, 1900 | " 1, | " 1 | 5 |
| | | 1,000 | " 1, 1901 | " 1, | " 1 | 5 |
| 4 | 40, 14 | 5,500 | July 1, 1899 | " 1, | " 1 | 5 |
| H.S. | 40, 14 | 25,000 } | " 1, 1895 } | " 1, | " 1 | 5 |
| | | | " 1, 1905 } | | | |
| Total....\$717,300 | | | | | | |
| Net decrease in bonded indebtedness during the school year, \$32,870. | | | | | | |

STATEMENT OF THE COMMITTEE ON FINANCE.

To the Board of Education of the City of Chicago:

The total available for the school year, ending June 30, 1897, was as follows:

Cash balances on hand June 30th, 1896:

| | |
|---------------------------------|---------------------|
| Account School Tax Fund..... | \$ 598,634 18 |
| Account School Fund..... | 30,360 85 |
| Account Jonathan Burr Fund..... | 2,263 49 |
| Account Special Funds | 1,756 51 |
| | <hr/> \$ 633,015 03 |

RECEIPTS.

| | |
|---|----------------------|
| From City School Tax | \$5,651,996 38 |
| From State Tax, Interest and Rentals..... | 792,573 13 |
| From investments Jonathan Burr Fund..... | 373 12 |
| From investments Special Funds..... | 758 50 |
| From miscellaneous sources..... | 35,726 33 |
| | <hr/> \$6,481,427 46 |
| | <hr/> \$7,114,442 49 |

The items of expenditures are as follows:

| | | |
|--|----------------|----------------|
| Superintendents' and Teachers' salaries, Primary and Grammar Schools..... | \$3,368,243 46 | |
| Superintendent and Teachers' salaries, High Schools..... | \$351,235 95 | |
| Teachers' salaries, English High and Manual Training School | 27,749 00 | |
| Teachers' salaries, Manual Training in Grammar Schools..... | 15,224 00 | |
| Teachers' salaries, Manual Training at the House of Correction | 5,297 00 | |
| Teachers' salaries, Normal and Practice School..... | 43,457 75 | |
| Teachers' salaries, Drawing..... | 17,324 00 | |
| Teachers' salaries, Music..... | 21,329 25 | |
| Teachers' salaries, German | 135,167 68 | |
| Teachers' salaries, Physical Culture. | 10,134 25 | |
| Teachers' salaries, Kindergartens ... | 39,085 88 | |
| Teachers' salaries, Deaf Mute Schools | 10,395 75 | |
| <hr/> | | |
| Total for High Schools and Special Studies..... | \$ 676,400 51 | |
| Total for Teachers' Salaries..... | | \$4,044,643 97 |
| New school sites and additions to old sites..... | \$ 51,190 00 | |
| New school buildings and incidental expenses in connection with the erection of same..... | 1,070,414 96 | |
| Furnishing new buildings..... | 39,014 81 | |
| Permanent improvements..... | 53,890 03 | |
| Special assessments..... | 14,197 51 | |
| General repairs to buildings, furniture, heating and ventilating apparatus..... | 230,468 23 | |
| Salaries, engineers and janitors of grammar and primary schools..... | 375,329 74 | |
| Official salaries..... | 57,369 25 | |
| Evening schools..... | 67,399 58 | |
| Fuel, grammar and primary schools... | 147,136 51 | |
| School supplies, printing and advertising..... | 61,848 90 | |
| School libraries, reference books, maps, globes, charts, ink, paper, pencils, etc..... | 25,849 44 | |
| Text books for indigent pupils..... | 26,302 41 | |
| School house supplies..... | 17,249 21 | |
| Rentals of sites and buildings..... | 94,906 30 | |
| Compulsory education..... | 15,548 36 | |
| Abstracts of title, court costs, etc..... | 609 30 | |
| Matured bonds and interest coupons of annexed School Districts..... | 71,223 70 | |
| Care and management of School Fund..... | 3,289 72 | |
| Manual training at the House of Correction, repairs, machinery, supplies, engineer's salary, fuel etc..... | 8,526 42 | |
| Normal School, repairs, fuel, books, furniture, engineer's salary, etc..... | 15,913 49 | |
| <hr/> | | |
| <i>High Schools:</i> | | |
| Salaries engineers, janitors and stenographer | \$ 23,315 49 | |

| | |
|---|--------------------|
| Fuel..... | \$ 7,056 52 |
| Repairs..... | 6,768 40 |
| Apparatus, laboratory supplies, gas, reference books, diplomas, etc..... | 6,690 92 |
| Pianos, printing and rebinding books | 1,462 77 |
| | <hr/> \$ 45,294 10 |

*English High and Manual Training
School:*

| | |
|---|--------------------|
| Salaries, engineer and janitor | \$ 1,734 50 |
| Rent of lot and building..... | 5,657 34 |
| Fuel, gas and repairs..... | 1,776 41 |
| Apparatus, machinery and tools..... | 8,194 68 |
| Lumber, hardware, nails, laboratory supplies, foundry supplies, etc..... | 2,562 34 |
| Printing, drawing paper, reference books, maps, charts, etc..... | 426 37 |
| Drawing tables, cases, etc..... | 1,142 88 |
| Insurance on machinery, etc..... | 600 00 |
| Electric power for machinery..... | 174 19 |
| Moving, repairing and storing ma- chinery..... | 1,500 00 |
| Fitting up new building... .. | 5,284 12 |
| | <hr/> \$ 29,052 83 |

*Incidentals for Special and Optional Stud-
ies, as follows:*

| | |
|---|----------------------|
| Music..... | 4,696 45 |
| Drawing..... | 15,544 49 |
| German..... | 1,840 33 |
| Physical culture..... | 1,983 19 |
| Kindergartens..... | 6,238 29 |
| Deaf mute schools..... | 486 32 |
| Manual Training in grammar schools. | 6,995 89 |
| School census, 1896..... | 3,195 27 |
| Contingent fund, educational account..... | 2,844 00 |
| | <hr/> \$2,565,848 03 |

*Cash in the hands of the City Treasurer June 30,
1897, as follows:*

| | |
|---------------------------------|---------------------|
| Account School Tax Fund..... | \$ 205,929 49 |
| Account School Fund..... | 297,000 29 |
| Account Jonathan Burr Fund..... | 92 93 |
| | <hr/> \$ 503,022 71 |

Cash in hands of the School Agent June 30, 1897:

| | |
|--|----------------------|
| Account special funds, income account..... | \$ 927 78 |
| | <hr/> \$7,114,442 49 |

Respectfully submitted,

HOWARD H. GROSS,
CLAYTON MARK,
JOHN F. WOLFF,

Committee on Finance.

REPORT OF THE COMMITTEE ON BUILDINGS AND GROUNDS.

To the Board of Education of the City of Chicago:

In making formal report of the work done under our jurisdiction during the year, we have the assurance that every dollar set aside for building purposes has been judiciously expended. If there have been any laxities, they are not such as merit criticism of our conduct. Conditions imposed by legislative enactment necessitate the payment occasionally of more than market values for school sites, and additions to school sites, but every safeguard consistent with sound business policy has been thrown around the construction department of the Board of Education, and we confidently assert that in every way possible a dollar's worth has been secured for a dollar. Competition to the fullest extent has been encouraged. Contractors, while being justly dealt with, have been held to strict account, and notwithstanding the reduced appropriation allotted us, we have endeavored to so distribute it as to effect the most satisfactory results. Almost a million and a half of dollars has been expended, and we invite the closest scrutiny

by the people of this community whose free-handed generosity affords every child superior educational advantages. We have sought to relieve congested districts, and we take pleasure in recording the fact that within the year we completed twenty-two buildings and additions, as follows :

SCHOOL BUILDINGS FINISHED DURING YEAR 1896-7.

| SCHOOL AND LOCATION. | ROOMS. | AWARDED. | COST. |
|---|--------|----------------|--------------|
| Pulaski, Leavitt St., bet. Coblenz and Lubeck Sts. | 17 | Oct. 9, 1895 | \$ 63,318 80 |
| Goodrich Addition, Taylor and Sangamon Sts. | 8 | Oct. 23, 1895 | 32,692 18 |
| Victor F. Lawson, Homan Av. and Palatine St. | *19 | Nov. 20, 1895. | 85,478 28 |
| Foster Addition, Union and Twelfth Sts. | 12 | Nov. 20, 1895 | 53,626 08 |
| Henry* H. Nash, Erie and W. 49th Sts. | *21 | Jan. 1, 1896 | 79,065 44 |
| Richard Yates, Cortland and Humboldt Sts. | *20 | Feb. 12, 1896 | 100,281 05 |
| Augustus H. Burley, Noble Av., near Ashland Av. | *22 | Feb. 26, 1896 | 86,159 38 |
| Wm. Penn Nixon, Dickens Av. and N. 42d Av. | 8 | Feb. 26, 1896 | 41,920 97 |
| McClellan Addition, Wallace and 35th Sts. | 9 | Mar. 11, 1896 | 44,598 93 |
| J. N. Thorp Addition, 89th St. and Superior Av. | 12 | Mar. 11, 1896 | 51,654 45 |
| George Schneider, Wellington and Hoyne Avs. | *19 | Mar. 25, 1896 | 76,744 51 |
| Pickard Addition, Oakley Av. and Hinman St. | 9 | Mar. 25, 1896 | 44,574 84 |
| Charles W. Earle, Hermitage Av. and 61st St. | 10 | April 8, 1896 | 44,597 50 |
| Franklin, Gymnasium, Office, Goethe St., bet. Wells and Sedgwick Sts. . | *26 | April 8, 1896 | 143,604 97 |
| Scanlan Addition, Clark St., bet. 117th and 118th Sts. | 12 | May 6, 1896 | 49,616 04 |
| Charles Kozminski, 54th St. and Ingleside Av. | *22 | May 20, 1896 | 85,940 83 |
| D. R. Cameron, Monticello and Potomac Avs. | 16 | June 2, 1896 | 70,361 10 |
| John M. Smyth, W. 13th St., near Blue Island Av. | 23 | June 17, 1896 | 78,610 66 |

| SCHOOL AND LOCATION. | ROOMS. | AWARDED. | COST. |
|--|--------|---------------|----------------|
| Cornell Addition, Drexel Av., bet. 75th and 76th Sts. | 12 | June 17, 1896 | \$ 55,113 82 |
| Tilden Addition, Lake and Elizabeth Sts. | 4 | July 1, 1896 | 20,837 37 |
| Burr Addition, Wabansia and Marshfield Avs. | *16 | July 29, 1896 | 78,488 73 |
| Irving Park, repairing damage by fire, St. Charles Av., bet. Everett and Douglas. | 7 | Dec. 12, 1896 | 8,898 00 |
| Total | | | \$1,396,082 93 |

*With Assembly Hall.

These buildings are complete in their appointments. They are adapted to the uses for which they were designed. They contain 316 rooms, capable of accommodating 17,064 pupils, exclusive of the Irving Park School, which was almost destroyed by fire and had to be remodeled and rebuilt. We have found it the part of wisdom to construct additions to buildings, instead of purchasing sites and putting up separate schools. By this policy we avoid increasing the pay-roll, except to the extent of providing the necessary teachers. Otherwise we would require principals, engineers and janitors for the separate buildings, and then again the personnel of a school is not disturbed as it has been when buildings have been opened in the vicinity of others. In this connection we wish to say that we have been utilizing the basements for kindergartens, manual training and class rooms generally. To this end the basement ceilings in all new buildings are being raised, thereby making these quarters absolutely sanitary.

By this means, also, space which has been heretofore available only for playrooms is utilized.

SCHOOL BUILDINGS COMMENCED AND NOT FINISHED
DURING 1897.

We have now in hand the following work which is being pushed forward rapidly :

| SCHOOL AND LOCATION. | ROOMS. | AWARDED. | EST. COST. |
|--|--------|----------------|-------------|
| Medill Addition, W. 14th Pl., bet. Loomis and Throop Sts..... | 13 | April 21, 1897 | \$41,000 00 |
| Cornell Addition, Jackson Blvd. and S. Francisco Av..... | *9 | May 5, 1897 | 54,000 00 |
| Ward Addition, 27th St. and Shields Av. | 9 | June 30, 1897 | 41,000 00 |
| Boiler House, Montefiore, Sangamon St. and Grand Av..... | .... | June 30, 1897 | 10,875 00 |
| Workshop and Supply Rooms, W. Monroe St., near Halsted St..... | .... | April 7, 1897 | 30,000 00 |

*With Assembly Hall.

Plans have been perfected for a twelve-room and assembly hall addition to the Beale School, and proposals will shortly be invited on the same. It is also proposed to erect a building on the site corner of Langley Avenue and Ninety-first Place, and the Board now has before it a recommendation for a new building at the Normal School grounds. In these buildings, as in those finished and begun during the school year, variety of style and architectural beauty will be sought. There are no buildings of a public nature that appeal directly to so many as our schools. Belief in the necessity of our free school system promotes pride in the success of that system.

and creates a public demand for school structures the appearance of which manifests popular regard for the welfare of our children. Then, again, it devolves upon us to make our buildings in the residence districts, where they are more than ordinarily conspicuous, attractive. Otherwise we could not expect to have the right to condemn land for school purposes conferred upon us.

Your committee dwells upon this for the reason that we are mindful of the wishes and needs of the public, and yet we feel that under existing circumstances rigid economy must prevail in the expenditure of our limited fund.

We are confident our buildings will withstand the closest investigation in the matter of economy of arrangement and construction, for the very good reason that the large amount of work done by the Board of Education, and the certainty of prompt payment, enables us to secure bids and award contracts on the most favorable terms. We assert, on the authority of material men and contractors, that the Board of Education obtains lower prices than any individual or corporation, public or private, in the city. However, our seating capacity is still inadequate to meet the demands of the rapidly increasing number of pupils. The results attained ought to reassure the people of this city and induce them to advocate more liberal appropriations for school buildings.

New York City recently set aside \$10,000,000 for building purposes, including the purchase of sites. While it

is true that our facilities in the matter of buildings are superior to those of the eastern metropolis, it is none the less true that our growth is such as to warrant the exercise of foresight in the construction of buildings large enough to meet all emergencies. Instead of sixteen, eighteen and twenty-room buildings it seems proper for us to say that we should erect twenty-four and twenty-eight room buildings.

During the year there has been prolonged discussion concerning our water supply. It devolved upon this committee to consider this matter in all its bearings, and, notwithstanding our conviction that our water is purer than that of any other of our great cities, there has been popular request for filtering or boiling apparatus, which we have met. We have had the co-operation of the Health Department of the city, the endorsement of which was required by us as a prerequisite to the introduction of any filter. A special committee prepared specifications on which all bids for filtering or boiling devices were based. Finally, the two companies whose bids were lowest, and whose filters were acceptable to the health authorities, were awarded contracts. Filters will, therefore, be installed in all but twenty schools and branches prior to the opening of schools. In these twenty schools it is intended to place boiling apparatus in order that a comparative test may be had.

We commend the employes of the Board, with whom we have been in close sympathy, and cheerfully pay trib-

ute to their integrity in the performance of the duties assigned them.

Respectfully submitted,

THOMAS CUSACK,

LOUIS O. KOHTZ,

CLAYTON MARK,

OTTO C. SCHNEIDER,

H. H. GROSS,

P. F. PETTIBONE,

OSCAR M. TORRISON,

JOHN F. WOLFF,

Committee on Buildings and Grounds.

REPORT OF THE COMMITTEE ON SPECIAL FUNDS.

To the Board of Education of the City of Chicago :

The work of the Committee on Special Funds appeals mainly to those who believe in day schools for the education of deaf children and to those who are interested in the distribution of the proceeds of the various funds which have from time to time been given for specific purposes in the schools.

But one new school has been opened the past year, the committee deeming it unadvisable to extend this work further until the general public were somewhat more acquainted with the fact that the education of normal deaf children was a part of the public school system of our city.

The passage of a bill which was introduced by Senator Bogardus, and known as "Senate Bill 160," "For an Act authorizing School Districts managed by Boards of Education or Directors to establish and maintain day schools for the deaf, and authorizing payment therefor from the State Common School Funds," has brought before the public mind

with some degree of emphasis this branch of our school work, and the coming year will, no doubt, bring a demand for an increased number of these schools.

The parents of deaf children, who desire to educate them at home rather than in an institution, will gratefully appreciate the work of Mrs. Charles R. Crane and Mrs. Marion Foster Washburne, both of this city, to whose unselfish interest and untiring efforts the passage of this bill was mainly due.

The dawn of a more hopeful outlook for the education of normal deaf children has come with this law providing State aid, and, it is believed by the earnest promoters of the measure, will gladden many a home where its provisions will prevent separation in the family during the school life of one or more of its members.

The choice of methods in the education of deaf children in day schools has been, and by the recent law still is, left to the parents, the committee believing that it should be their privilege and exclusive right to choose as between the combined and strictly oral systems.

It is very much to the credit of Chicago that the permanence of organized work for the deaf, as connected with the National Educational Association, is due to her own foresight and energy. In March of this year, a petition to the Executive Committee of the National Educational Association originated here, asking for permission to organize a Round Table in the interest of the deaf, which was granted. The Round Table was held in July at the National Educational

Association in Milwaukee, and with it a practice school, participated in by oral and day schools only, which was one of the most interesting features of the great convention. Dr. Alexander Graham Bell delivered an able address before the General Assembly on "The Education of the Deaf." The program of the Round Table represented all methods, the papers covering a wide range of subjects. Discussions were general and without the venom that often characterizes such gatherings. The permanent department was organized under the name of "Department for Those Requiring Special Instruction." There has been no more significant step in the progress of work for the deaf, and Chicago may well feel proud of her connection with the initial movement of so important a measure.

The day schools for deaf children have been during the past year under the able supervision of Mary McCowen, whose long experience in this particular line of education has eminently well fitted her for this position, and her annual report is hereby cheerfully and confidently submitted:

DAY SCHOOLS FOR THE DEAF.

During the year past, schools for deaf children have been maintained in six different sections of the city, four using the Combined System method of instruction, and two the Pure Oral, with a total enrollment of 120 pupils.

PURE ORAL SCHOOLS.

The Pure Oral Schools were located in the Yale and Lincoln School buildings more than ten miles distant from each other, one on the south side of the city, the other on the north side.

The class in the Lincoln School opened for the first time in September, in charge of Mrs. Alice Bellows, with six pupils, all but two of whom were beginners. Only one additional name was enrolled during the year, but the attendance was better than the average, and the school closed in June with six pupils, its original number.

The Yale School, which began as an experiment in January of 1896, opened again in September with twenty-one pupils and two teachers, Misses Montgomery and Beaman, who had charge last year. These twenty-one pupils represented every grade, from beginners who did not know that things had names, to pupils doing regular eighth grade work. Though these classes were entirely too large to expect good results, the number continued to increase steadily throughout the year, reaching a total enrollment of thirty-six, with a maximum membership of thirty-two and an attendance in June which lacked but one of showing an increase of 50 per cent on the attendance in September.

Notwithstanding the size of these classes, no assistance was available till January, when Miss Ellen Taylor, a teacher trained in the McCowen Oral School for Young Deaf Children, passed the necessary examination, and was added to the corps of instructors; and in March, Miss Barbara Leu, who could be spared from the Monroe Street School on account of the decrease in attendance there, was transferred to the Yale.

The work at the Yale School compares favorably with the best work done by hearing children. A member of the advanced class who was with us last year, and who with the others received all his previous education at the McCowen Oral School, a lad congenitally, totally deaf, this June completed the first year high school work with hearing pupils in the Coldwater, Michigan, public schools, and of him his Superintendent said, in public meeting of the National Educational Association at Milwaukee, that he passed his examinations with credit to himself and his teachers, and that "in mathematics he was better than the average, in composition and English classics as good as the best." Of such a record Chicago, as well as the Yale School and his individual teachers, may justly feel proud. But it should be remembered that this record sets the pace, not for a genius, but for every deaf child of average ability and studious habits who has

a proper opportunity in his early years, and thereby lays upon us an obligation to provide such opportunity for all.

MOTHERS' STUDY CLUB.

One of the notable features of this school is the Mothers' Study Club, organized the first week of its opening. Meeting semi-monthly and embracing, first, a thorough investigation of methods, and later, papers and lectures along lines of regular child study, this Club has formed the connecting link between home and school, keeping mother and teacher in touch and enabling each to profit by the experience of the other, working thus harmoniously together for the best interests of the child. Occasional meetings have been held in other sections of the city which will undoubtedly lead in the future to permanent and more helpful organizations in these localities.

COMBINED SYSTEM SCHOOLS.

The Combined System Schools have been mentioned in former reports many times since the establishment of the first one, twenty-two years ago. These schools which, to accommodate the rapidly increasing and ever shifting population of our city, have from time to time been removed from one locality to another, have this year been housed in the Wicker Park, Monroe Street, Prescott and Hartigan Public School buildings, in charge of eight teachers, as follows: Miss Griswold and Mr. Haskins at the first named; Mr. Gallaher and the Misses Wright, Leu and Williams at the second; Mrs. Woodworth at the third; and Mrs. Coombs at the fourth.

The total enrollment for the year of these four schools reached seventy-seven pupils, while the maximum membership on any one day was but sixty, and the attendance, which was irregular from the first, decreased steadily till January, when it reached thirty-five, the minimum number. With the return of spring, there was a gradual increase, and at the close of the school year in June, forty-eight pupils were in attendance, twenty per cent. less, however, than were present the first week in September. A large proportion of these children are doing primary work, most of them quite elementary, their irregularity of attendance interfering

seriously with possible progress in some cases, while in many other cases there is a positive lack of mental ability.

DEFECTIVE CHILDREN.

Among the actually deaf, are always to be found the different grades of mentality that prevail among the hearing, namely: the bright, the average, the dull, the stupid, the very stupid, and all conditions more abnormal than this called collectively the feeble-minded, and each grade, as with the hearing, capable of receiving as high an education as mentality will allow. It is also true that a change of environment may enable the apparently stupid child, either deaf or hearing, to accomplish much, or the bright one little; also that uniform results cannot be expected and should not be demanded of all grades of intellect; also that a child so abnormal in any direction as to interfere with the work of a class of hearing pupils should not be placed with the deaf. The deaf depend, in their early work, almost altogether on their power of vision and faculty of imitation, and of all children should be surrounded by the most perfect possible example which may be imitated without detriment. The world owes the feeble-minded child a chance, but not at the expense of those already handicapped by deafness. Better classification, based on a careful examination before the admission of the defective children and the authority to transfer them to the class where each can work with greatest advantage to himself and least annoyance to others, would make conditions more just for all.

LIMITATIONS OF THE DEAF CHILD.

In addition to the limitations of capacity and environment, which are common to humanity, the deaf child, as a result of his deafness, is without speech and has no knowledge of language, the latter being, of the two, the greater deprivation. Without language, his knowledge in all directions is necessarily limited to his own narrow personal experience, the whole great world, to him, is unknown except the tiny corner which he himself has seen, and time for him is but the span of his own brief, unreliable memory. He can neither take advantage of a good environment, nor rise above a poor one. True, he invents a crude language of motions that suffices for his bodily wants, his bare existence,

but he has no possible means of himself acquiring the language used in his own family and by the world about him, and is, in himself, powerless to realize the possibilities of his God-given powers. Without education, life means to the brightest deaf child little more than to the feeble-minded. With education, he may become an artist, whatever his occupation, a benefactor, a leader in the world's great works. Put him early in the hands of a skillful teacher who understands how to reach his imprisoned mind, give him the knowledge and the use of language, and you have given him the key to the accumulated wisdom of the ages, you have opened to his view the stairway on which he may mount to heights limited only by his Maker. In view of these conditions, it is plainly a matter of economy as well as philanthropy to provide wisely for the education of young deaf children.

NEW SCHOOLS.

There is urgent necessity for the opening of new schools another year, and while this matter is open for consideration I beg leave to suggest a plan which seems to me entirely feasible, and which combines all the advantages claimed for decentralization for the younger children, with the economy of centralization for older children.

ORGANIZATION.

Open schools, upon petition of properly qualified residents, wherever needed to accommodate beginners of any age and all pupils of the first and second primary grades. Locate these schools as near as possible to the homes in order that all children of school age may be able to attend. At present a majority of the young children who should be in school are obliged to remain at home because unable to travel long distances alone, and few families are so situated that they can bear the inconvenience and added expense of sending someone to accompany a young child on the cars to and from school both morning and night, although this is actually done in a few cases.

The classes in these primary schools should be small, not more than four or five to one teacher, who would then have none too much time for the individual attention absolutely

necessary for the deaf child acquiring his elementary vocabulary.

INTERMEDIATE SCHOOLS.

Because of the disparity in age of pupils at time of entrance, the progress in these primary classes would probably be very irregular and, after a time, instead of each class carrying one or two third or fourth grade pupils, the advanced pupils from several of these classes in adjacent sections of the city might unite at some convenient location to form a separate class of third or fourth grade. It may sometimes be advisable for two primary classes, each of which has lost pupils by promotion, to unite under one teacher, and occasionally for two entire primary classes to unite, forming an intermediate, in charge of one teacher, these intermediate schools in turn graduating their pupils to a central Grammar School, located at some convenient point accessible from all parts of the city. Such a school could be well equipped at much less expense than it would require to provide what was needed for advanced pupils, one or two in each class here and there over the city.

NUMBER OF PUPILS TO A TEACHER.

A primary teacher cannot do good work with more than four or five pupils; a teacher of an intermediate grade, where children have learned to give attention and to work under direction, can easily handle six to eight pupils, if well graded; while a teacher of a grammar grade, where children have learned self-control and studious habits, can instruct from eight to twelve or sixteen. This division would bring much better results, with no more expense to the city, than where, as at present, we require each teacher, of whatever grade, to carry eight pupils.

UNIFORMITY.

The deaf child has much to learn before he is ready to begin even what is known as kindergarten work for the hearing child, and he must be given time in which to do it; but, in my opinion, no deaf child should be allowed to enter third grade work who can not do acceptably all that is required of the hearing child entering the same class (oral speech excepted). In order to unify the work it is imperative that we follow a

regular course of study, and pupils should be allowed to pass from one grade to another only after having completed a definite amount of the prescribed course. They should share, during the entire course, all advantages of physical culture, drawing, voice culture, and manual training, just as provided for hearing children, and pupils who successfully finish the work of the eight grades, as outlined above, would be able to, and undoubtedly many of them would desire to, take the regular high school course with hearing children.

RECAPITULATION.

With a uniform course of study, and classes carefully graded, for all deaf children of the city, whether taught by the Combined System or the Pure Oral, with small classes near the homes for primary children, larger classes at central points for intermediate children who are able to go greater distances alone, and a central grammar school, or two if necessary, one for each method, our schools for the deaf may, in my opinion, be vastly improved. In this connection I submit the attached statement of enrollment and attendance in the schools for the deaf for the year 1896-7.

In closing, I would respectfully call attention to the fact that the terms "deaf mute" and "deaf and dumb," as applied to deaf children, have been for some years in growing disfavor, a majority of the prominent institutions for the deaf in this country having taken the necessary legal steps to enable them to omit from their incorporate names these objectionable terms, which are but a legacy of the barbaric past. Is it not in accordance with the liberal spirit and broad-minded policy of our present school authorities to further this movement by dropping these words from official paper and all correspondence issuing from the office of the Board of Education of the City of Chicago?

MARY McCOWEN,

*Supervising Principal Chicago Public
Day Schools for the Deaf.*

STATEMENT OF ENROLLMENT AND ATTENDANCE—SCHOOLS FOR THE DEAF.

For the School Year 1896-7.

COMBINED SYSTEM SCHOOLS.

| SCHOOLS AND TEACHERS. | Sep- tember | Octo- ber | Novem- ber | Decem- ber | Jan- uary | Feb- ruary | March | April | May | June | Total At- tendance as Shown by Register. |
|-----------------------|----------------|--------------|---------------|---------------|--------------|---------------|-------|-------|-----|------|---|
| <i>Hartigan—</i> | | | | | | | | | | | |
| Mrs Coombs..... | 6 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 6 | 11 |
| <i>Prescott—</i> | | | | | | | | | | | |
| Mrs. Woodworth..... | 8 | 7 | 9 | 7 | 2 | 8 | 7 | 7 | 6 | 8 | 10 |
| <i>Wicker Park—</i> | | | | | | | | | | | |
| Miss Griswold..... | 13 | 15 | 11 | 12 | 10 | 12 | 12 | 12 | 13 | 12 | 19 |
| <i>Mr. Haskin—</i> | | | | | | | | | | | |
| <i>Monroe Street—</i> | | | | | | | | | | | |
| Mr. Gallaher..... | 16 | 15 | 14 | 13 | 10 | 13 | 13 | 11 | 10 | 9 | 37 |
| Miss Leu..... | 10 | 10 | 10 | 11 | 5 | 11 | 10 | 9 | 8 | 7 | ..... |
| Miss Wright..... | 7 | 7 | 5 | 5 | 0 | 4 | 5 | 6 | 6 | 6 | ..... |
| Miss Williams..... | | | | | | | | | | | |
| Total..... | 60 | 59 | 57 | 56 | 35 | 56 | 55 | 53 | 51 | 48 | 77 |

ORAL SCHOOLS.

| | | | | | | | | | | | |
|----------------------|----|----|----|----|----|----|----|----|----|----|----|
| <i>Yale—</i> | | | | | | | | | | | |
| Miss Montgomery..... | 21 | 23 | 26 | 27 | 29 | 32 | 33 | 34 | 36 | 31 | 36 |
| Miss Beaman..... | | | | | | | | | | | |
| Miss Taylor..... | | | | | | | | | | | |
| (Miss Leu)..... | | | | | | | | | | | |
| <i>Lincoln—</i> | | | | | | | | | | | |
| Miss Bellows..... | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 7 | 6 | 7 |
| Total..... | 27 | 29 | 32 | 33 | 35 | 38 | 40 | 41 | 43 | 37 | 43 |

AWARD OF FOSTER DIPLOMAS.

Your Committee on Special Funds further reports the award of Foster Diplomas at the close of the schools for 1896-97, as follows:

AGASSIZ SCHOOL:

Lillian Belfield,
George Stevens,
Bertha Liebemann,
Elsie Ludwig.

ALCOTT SCHOOL:

Alice Rondthaler,
William Sullivan,
Fred Fieler,
Anna Rondthaler.

ALICE L. BARNARD SCHOOL:

Hubert Moore,
Weir Anderson.

ANDERSEN SCHOOL:

Lillian Hanseina Anderson,
Leo Dolkart,
Paulina Dolkart,
Ida Marie Steinmetz,
Mary Shutan,
Mary Jacobs,
Rudolph Pilat.

ARMOUR STREET SCHOOL:

Olga Hansen,
Edward White,
Joseph Nielsen,
Lilly Gulbrandsen.

ARNOLD SCHOOL:

Helen Gail Moore,
Leo G. Ludwig.

AUBURN PARK SCHOOL:

Harry Wayman,
Leslie Minard,
Agnes Weaver.

AUDUBON SCHOOL:

Estella Kavanagh,
Ella Van Tassel.

AVONDALE SCHOOL:

Emma M. Schweitzer,
Henry Schwinkendorf,
Hansine Blenke.

BANCROFT SCHOOL:

Emma Fricke,
Edith Hoss,
Edwin Sorensen,
Anna Peterson,
Walter Olson,
Helen Pischke,
John Anderson.

BEALE SCHOOL:

Harry Lee,
Frank Young,
Edith Brown.

BISMARCK SCHOOL,

Maude Evelyn Bradshaw,
Helen Matilda Hanson.

BLAINE SCHOOL:

Mabel Koehler,
Lucile Treganza.

BOWEN SCHOOL:

Frances Purvis,
Nellie Madison,
Alvin Johnson.

BOWMANVILLE SCHOOL:

Esther W. Tolf.

BRENAN SCHOOL:

George Staab.

BRENTANO SCHOOL:

Frieda E. Olson,
Benjamin B. Freud
Helen L. Keeve,
Ella L. Taylor.

BRIGHTON SCHOOL:

Kathleen M. Moore,
Clara J. Brueggeman.

BROWN SCHOOL:

Mary Crutchfield,
Elspeth MacLennan,
Mary Pardee,
Lorna Lydiard,
Lorette Harkins,
Guy Reynolds.

BROWNELL SCHOOL:

Clyde Uhrig,
Josephine G. Thompson,
Eleanor F. Jones.

BRYANT SCHOOL:

Carrie Immel.

BURNSIDE SCHOOL:

John De Vries.

BURR SCHOOL:

Anna Miller,
Ada C. Nelson,
Edward Cavage,
May R. Murphy,
Arthur E. Wiedenhoeft,
Walter W. Steinkrauss.

BURROUGHS SCHOOL:

David R. Kennicott,
John Blank.

CALHOUN SCHOOL:

Harold Kilner,
Edward Blair,
Olive Methot,
Lee Douglas,
Ralph Carroll,
Edith Phillips.

CALUMET AVENUE SCHOOL:

Irene L. Young,
Cæsar Peterson,

CARPENTER SCHOOL:

Sadie M. Anderson,
Phena M. Smith,
Lillie I. Johnson,
Carrie Hansen,
Anna S. Tollefson,
Esther T. Ranseen.

CARTER SCHOOL:

Elba McNama.
Lucy Rodeck.

CENTRAL PARK SCHOOL:

J. Leonard Hancock,
Anna Louise Hawkins,
Sallie Clark,
Harold H. Morgan.

CHASE SCHOOL:

Marjorie Brunton,
Hilda Anderson,
Anna Halverson.

CHICAGO LAWN SCHOOL:

Lucie Mae Cravener,
John Beach Rhodes.
Lura Esther Shoupe.

CLARKE SCHOOL:

Edwina G. Fitch,
Hannah C. Bethke,
Florence A. Tobias,
Olive S. Neff,
Regina A. Payne,
Rose Nathan,
Pollie Junginger.

COLMAN SCHOOL:

Martha A. Auer,
Kathleen M. Gibbons,
George B. Schwachtgen.

COOPER SCHOOL:

Pauline Flinkow.

CORNELL SCHOOL:

Sadie Howland,
Henry Krogh.

CUMMINGS SCHOOL:

Alice Maud Price.

DAVID SWING SCHOOL:

Mary E. Weber.

D. R. CAMERON SCHOOL:

Lottie Emelia Sutton.

DORE SCHOOL:

Charles Kennedy,
Richard Kennedy.

DOUGLAS SCHOOL:

Adele Willets,
Josephine Hopkins,
Maude Hart,
Walter Hoops,
May Coleman,
Stanley Rich,
Augusta Wilson,
Jennie Gartside,
Clifford Gaylord.

D. S. WENTWORTH SCHOOL:

Eva Rosanna Kinsella,
Mary Louise Hitzman,
Emily Lindsey Breeden.

ELLEN MITCHELL SCHOOL:

Amelia Monghild Anderson,
Mabel Lyngaas,
Bessie V. Mara,
Minnie Cora Mahacek,
Hulda Lundblad,
Lillie H. Smith,
Annie T. Hammer,
Adolph Bachman.

EMERSON SCHOOL:

Hugo Sonnenschein,
Eunice Helen Munson,
Laura Arnold Bradley,
Edward J. McKone.

EVERETT SCHOOL:

Katie A. C. Cronin.

FALLON SCHOOL:

Anna A. Ahern,
Katherine T. O'Leary,
Cora Munn.

FARREN SCHOOL:

Harry B. Marshall,
Charles C. Kuning,
Amelia Mabel Scott.

FERNWOOD SCHOOL:

Mary De Jong.

FORESTVILLE SCHOOL:

Belva B. Weinberg,
Charlie Hill,
Ada Little,
Maude May Plopper,
Grace W. Neal,
Lucy May Stuart,
Matilda N. Bahr.

FRANKLIN SCHOOL:

Annie Barr,
Josie Bentley,
Minnie Wattman,
Hernold Nelson,
Annie Tilden,
Charlotte Gehrs,
Catharine A. Sweeney,
Thomas E. Reardon,
Anna J. Johnson,
Amelia Gepke,
Ollie McKeon,
Margaret Ryan.

FROEBEL SCHOOL:

Emma Bahr
Agnes B. Clohesy,
Eleanor Schuman,
Esther Soderberg,
Annie M. Suess,
Edgar Tunelius.

GALLISTEL SCHOOL:

Pearl E. Neithercut,
Kate E. Rogan.

GARFIELD SCHOOL:

Pearl Silverman,
Harry Katzin,
Pearl Goldberg.

GEO. HOWLAND SCHOOL:

Hugo Hochberger,
S. Marion Southgate,
N. Gertrude Ermeling.

GEO. H. THOMAS SCHOOL:

Carrye Rosenheim.

GEO. WM. CURTIS SCHOOL:

Polly Green,
Henly Thorp.

GLADSTONE SCHOOL:

Maude Fulmer,
Charles Laib,
Mabel Munro.

GOETHE SCHOOL:

Dagmar Larson,
Eva Mace.

GOODRICH SCHOOL:

Amelia Smith,
Marion Hall,
Ada G. De Costa.

GRAHAM SCHOOL:

John W. Dowell,
Mary T. Metz,
William Avery Eastburn,
Inda Bell Chaney,
Thomas J. Cotter,
Kittie J. Vaughan,
Elizabeth S. Laidlaw,
Frank L. Mickle.

GRANT SCHOOL:

Fannie Louise Warren,
Robert Holt Salisbury.

GREELEY SCHOOL:

Ethel M. Templeton,
Winifred Richards,
Annie E. Lehmann,
Edna C. Linee.

GREENE SCHOOL:

Florence E. Griffiths,
Nellie Conroy,
Annie O. Bartlett.

GREENWOOD AVENUE SCHOOL:

Grace A. Heilprin,
Helen M. Shedd,
Emily Dering,
Edwina Dorland.

GRESHAM SCHOOL:

Ray C. Tuttle,
Mabel Robertson.

HAMILTON SCHOOL:

Louise Jacobs,
Minnie Stark,
Anna Claussen.

HAMMOND SCHOOL:

Rose Vlach,
Frank Koller.

HANCOCK SCHOOL:

Mary Josephine McGuire,
Lena Belle Pond,
Tillie Josephine Storn.

HARRISON SCHOOL:

Agnes Johnson,
Clara Martin,
Charlotte Hitz,
Edgar Andersen,
Agnes Thompson,

HARVARD SCHOOL:

Florence Marsh.

HAVEN SCHOOL:

Flora Levison.

HAWTHORNE SCHOOL:

Hulda E. F. Sandburg,
Anna Magdalene Weimar,
Hannah O'Berg.

HAYES SCHOOL:

H. Fay Fox,
Katharine S. Wall,
Martha A. Byrne.

HEADLEY SCHOOL:

Emma C. Meyer,
Rose Anna Sokup,
Esther A. Ostlund,
Helen C. Zergler,
Loraine E. Hunt,
Rena Myers.

HEALY SCHOOL:

Martha Grosse.

HENDRICKS SCHOOL:

Katy O'Hara,
Lilly Lindholm,
Henry Loding,
Alice Quinn.

HENRY CLAY SCHOOL:

Annasteen R. Hurd.

HENRY H. NASH SCHOOL:

Lucie Ankersen,
Georgie L. Polk.

HERMANN RASTER SCHOOL:

Jennie Scanlon.

HOLDEN SCHOOL:

Charles M. Stewart,
Kittie F. Quilty.

HOLMES SCHOOL:

Jessie A. Magoon,
Bertie J. Moore,
William M. Gentleman,
Cassie E. Snyder.

HORACE MANN SCHOOL:

Mary E. Sullivan,
Gertrude Geneva Doran,
Annie V. Eagan.

IRVING SCHOOL:

Lizzie Wohlleben,
Anna Gutzwiller,
Blanche Ayres,
Leo Fleming,
Mary E. Colton,
Jennie M. Hodge,
Nettie A. Merriam,
Etta Simons.

IRVING PARK SCHOOL:

Martha Jessie Killen,
Mary Belle Whitman,
Nellie Louise Calkins.

JAMES W. SCOTT SCHOOL:

Helen A. Whitney,
Mabel A. Deane,
Dorothy B. Hess.

JEFFERSON PARK SCHOOL:

Grace Marian Price,
Grace Maud West.

J. L. MARSH SCHOOL:

Ella D. Soderstrom.

J. N. THORP SCHOOL:

Mary Ellen Grindey.

JOHN CRERAR SCHOOL:

Alice M. McLean,
Mildred T. Quinn.

JOHN ERICSSON SCHOOL:

Alice LaGallais Watte,
Ella Evangeline Sinclair,
Erna Bridgam.

JOHN McLAREN SCHOOL:

Jacob L. Roth,
Charlotte E. Burns,
Allen V. Moyer,
Bertha I. Samuel,
Julia Simon,
Blanche Tausick,
Ella Mendsen,
Ella Louise Morrison.

JOHN M. SMYTH SCHOOL:

Louis N. Nathan,
Sigmar B. Pirosh,
Solomon M. Yudelson,
Myer Linker.

JONES SCHOOL:

Gabriel Lipman,
Philip C. S. Rennwald,
Josephine A. Wendell.

J. R. DOOLITTLE, JR., SCHOOL:

Margaret E. Swartz,
Winifred M. J. Reed,
Genevieve Sullivan,
J. Percy Ephgrave,
Bessie B. Hedglin,
Norman Lee,
Allan Lee.

KEITH SCHOOL:

Lucy H. Churchill,
Joseph R. Watkins.

KENWOOD SCHOOL:

Harriet Bowen,
Effie L. Hopkins.

KERSHAW SCHOOL:

Maude Martin,
Selma Forsberg,
Maggie Stuart,
Mamie Neal.

KING SCHOOL:

Mabel E. Oliver,
May Waring,
Elmer Davies,
Richard M. Harvey,
Ethel M. Richardson,
Ellen Coles.

KNICKERBOCKER SCHOOL:

Grace F. Stowell,
Mabel W. Nunamaker,
Clara A. Riordan,
Elizabeth Anna Brummand.

LA FAYETTE SCHOOL:

Bertha C. Messmer,
Oscar H. Grundeis,
Helen T. Borucki,
Clarence W. Harnblom.

LANGLAND SCHOOL:

Maude M. Vanderpool,
Mamie L. Olsen.

LA SALLE SCHOOL:

Ernest Johnston,
Virginia Porter,
Eva Rocca,
Ida Weise.

LAWNDALE SCHOOL:

Cora M. McAllister,
Tina Belle Houston,
Laura M. Chilvers.

LEWIS SCHOOL:

Lulu M. Brown,
A. Donald Graver,
Clara H. Taylor,
Daisy M. Bowlby,
Alice Hildreth,
Alice W. S. Brimson,
Laura Maher,
Martha Barrow.

LINCOLN SCHOOL:

Hattie Schuttge,
Gertrude Crocker,
Mabel Cooper,
Lily Zimmerman,
Jessie Arms,
Marie Fleming.

LINNE SCHOOL:

Edith Holbrook.

LOGAN SCHOOL:

Mary Publow,
Joseph F. Leszczynski,
Bella Tauber,
Ella M. Publow,
Mertie E. Spencer.

LOUIS NETTELHORST:

Irene Garvey Ford,
Annette E. Heinbach,
Marion E. Gray,
Ruth H. Redington.

LOWELL SCHOOL:

Helena M. Himsel,
Hazel Violet Mills,
Margaret Nielsen,
Theresa A. Oyen,
Bertha Solomon,
Rose M. Bezouska.

McALLISTER SCHOOL:

Gazelle Beder,
Agnes E. McGillen.

McCLELLAN SCHOOL:

Mabel Richards,
Estella Pokrant,
Michael Leahy,
Meta J. Cassels,
Anna M. Pinger.

McCOSH SCHOOL:

Mary Kronmann,
Paul Van Cleef,
Roland S. Quarrier.

McPHERSON SCHOOL:

Oliver Thompson,
Grace Percy.

MADISON AVENUE SCHOOL:

Rhea L. Tyler,
Edith Ralph,
Max Barth,
Frieda J. Janssen.

MARK SHERIDAN SCHOOL:

Ignatius Barnard,
Lillie A. Smith.

MARSHALL SCHOOL:

Elsie Trabue,
Flora Spencer,
Grace Williams,
Lillian Ehrman.

MARQUETTE SCHOOL:

Harriet B. Fraley,
Caroline R. McChesney,
Herbert G. Turnbull,
Emily T. Cohan,
George D. Merritt Hall,
Florence E. Stokes,
William A. Brewerton,
Roland H. Bennett,
Hazel M. Agnew,
Bessie O. Howard.

MELVILLE W. FULLER SCHOOL:

Millie Hartman,
Marie Cunningham,
Jennette Corey.

MONTEFIORE SCHOOL:

Martin Loughney Nealis.

MORRIS SCHOOL:

Elizabeth Kuhn,
Charles Stromberg,
Florence Olson.

MOSELEY SCHOOL:

Olive Carlborg,
Herbert H. Morehouse,
Foster Eggleston,
Miriam Rawlings.

MYRA BRADWELL SCHOOL:

Ruth Berger,
Roger Darling,
Malcolm Black.

NEWBERRY SCHOOL:

Ancel R. Stowe,
Armand L. Wilhelm,
Mary C. Stauder.

NORWOOD PARK SCHOOL:

George H. Gilsow.

OAKLAND SCHOOL:

Charles Cutler Parsons,
Eva Margaret Ramsey,
Allan Eugene Starwalt,
Louise Barbour.

OAK RIDGE SCHOOL:

Clara Hemmings Furry,
Nellie Josephine Johnson.

OGDEN SCHOOL:

Arthur Carpenter,
Elsie M. Smith,
Jessie Wheeler,
Else Lichtenberger,
Annie Johnson,
Lydia Ehrhart.

PARKMAN SCHOOL:

William Rooney,
George F. Hagstrom.

PARK MANOR SCHOOL:

Amanda Nelson,
Mabel Pratt,
Hazel Zimmerman.

PARKSIDE SCHOOL:

Georgia Garlick,
Carleton A. Pendleton.

PERKINS BASS SCHOOL:

Leona Madison,
Jessie Kirkpatrick.

PHIL SHERIDAN SCHOOL:

Mary Williams,
Lillian Thompson,
Bessie N. Jewell.

PRESCOTT SCHOOL:

Alma Hennessey,
Sophie Redwanz.

PULLMAN SCHOOL:

Francis P. J. X. McGuane,
Otto L. Kupka,
Emily L. Nettleton.

RAVENSWOOD SCHOOL:

Kate Holcomb,
Frankie Sherman,
Catherine W. Potts,
Catharine A. Mitchell.

RAY SCHOOL:

Nora K. Dunn,
Jessie Mulwanie,
Stella Radebaugh,
Lynette Ford,
Frances Chandler,
Evelyn Allen,
Fount Jennings.

RAYMOND SCHOOL:

Julia B. Hibbard,
Henry W. Olschner,
Zenobia Zelmira Jones,
Edith Christie,
Julia A. Collins.

RICHARD YATES SCHOOL:

Nanna E. Marx,
Christine I. McGaffey,
Rosalie Marie Anderson,
Rose Emily Edstrom,
Walter Iverson.

RIVERDALE SCHOOL:

Lydia De Vries,

ROGERS PARK SCHOOL:

Stella Aletta Chappell,
George Percy,
Orrel Manley.

RYERSON SCHOOL:

May Dolan,
Nellie K. Alston,
Fred J. Berg.

SCAMMON SCHOOL:

Levia Lomas,
Mardgie Walbridge.

SCANLAN SCHOOL:

Laura Dell Watkins.

SCHILLER SCHOOL:

Rose Albertine Swanson.

SHERWOOD SCHOOL:

Clara L. Keller,
Pearle Bell,
Esther E. Jernberg,
Edward Turner.
Claudia Simmons.

SEWARD SCHOOL:

Katie C. Schneider.

SHERMAN SCHOOL:

Rose Loyola Fitzsimons.

SHIELDS SCHOOL:

Max DeLemon.

SKINNER SCHOOL:

Gladys R. Sawyer,
Nannie Bell Westover,
Annie L. White,
Elizabeth J. Ohlen.

SPRINGER SCHOOL:

John R. Pimlott,
Mollie Slyne,
Arthur Keefer.

STONY ISLAND AVENUE SCHOOL:

Hattie Dyson.

SUMNER SCHOOL:

Theresa Maria Waibel.
Ada E. Roadifer,
Nellie Viola Allison.

TAYLOR SCHOOL:

Maude E. Beder,
Gunnell J. Jager.

TENNYSON SCHOOL:

Arthur H. Barkley,
Blanche L. Sheaffer.

THOMAS CHALMERS SCHOOL:

Mary A. C. O'Connell,
Jennie Florence Keenan,
May Rackham.

THOMAS HOYNE SCHOOL:

Pearl M. Brown,
Louisa Lindh,
Anna E. Rosler.

THROOP SCHOOL:

Rosa Reese,
Edward Dvorak,
Joseph Valenta.

TILDEN SCHOOL:

Lucile Geneveve Fitzgerald,
Ethel Blackmore Young,
Julia Mae Cummings.

TILTON SCHOOL:

Beatrice A. Moore,
Herbert Barker,
Lulu M. Brooks.

VAN VLISSINGEN SCHOOL:

Jennie Waalkes.

VICTOR F. LAWSON SCHOOL:

Rosa Joseph.

VON HUMBOLDT SCHOOL:

Sarah Peterson,
Agnes Kalley,
Johanna Finstad,
Eleanor Rauch,
Harry Schutz,
Shern Hansen,
Thaddeus Ligman,
Mollie Price,
Lucile Laurence.

WALSH SCHOOL:

Otto Fried,
Otto Sindelar,
Minnie Tauber.

WALTER SCOTT SCHOOL:

Richard Chamberlain,
Fannie Russ,
Alfred Meneley.

WASHINGTON SCHOOL:

Winnifred M. Hansam,
Freda Peterson,
Rose A. Hoefer,
Martha M. Noelke.

WEBSTER SCHOOL:

Nettie H. Strauss,
Lizzie J. Faude,
Lena Fischer.

WELLS SCHOOL:

Victor Kulp,
Hulda Joss,
Elsa Froebe,
Anna Sophia Kosentra,
Emma A. E. Luckel,
May Angeloss L. McConnell.

WEST PULLMAN SCHOOL:

Gordon Scott Fulcher,
Effie N. Alden.

WICKER PARK SCHOOL:

Carrie D. Niemann,
Jennie M. Helgersen.
Rose A. Petrie,
Sarah B. Rothenberg,
Agnes C. Mill,
Berent M. Wold,
Frank E. Kahl.

WM. PENN NIXON SCHOOL:

Mamie Groble,
Louis H. Gale.

WOODLAWN SCHOOL:

Samuel Hirschl,
Jessie Carroll,
Helene See,
Lucile Cannon.

W. C. GOUDY SCHOOL:

Lillian Alice McDonnell,
Helen Goudy Slocum,
Edith Pearl Winterrowd.

YALE SCHOOL:

Tim H. Merrill,
Hazel Carlyle,
Roland Smalley.

Respectfully submitted,

EVELYN A. FRAKE,

BENJAMIN J. ROSENTHAL,

D. R. CAMERON,

WALLACE F. KIRK,

JOHN S. MILLER,

Committee on Special Funds

REPORT OF THE COMMITTEE ON NORMAL SCHOOL.

To the Board of Education of the City of Chicago:

The development of the idea of training teachers for their work forms a very interesting chapter in Chicago's educational history. In 1856, when the first high school was established, a department was organized for the training of teachers. The same conditions required of students applying for admission to the high schools were demanded of students for admission to the Normal School. In 1865 a practice school was established in connection with the Normal department. In his annual report for 1896 Superintendent Lane says that "several efforts were made to require those who were admitted to the Normal School to be graduates of the High School, but they were unsuccessful. To prevent filling the schools with teachers who were not properly educated, and because more had been graduated than were needed in the schools, it was voted to temporarily suspend work in the school. It was never reorganized." The Normal School was closed in 1877. From 1877 to September, 1893, there was no

school or department for the training of teachers in the City of Chicago. High school graduates who passed the teachers' examination were assigned to schools as cadets to learn how to teach. When they succeeded as cadets they were assigned to positions as teachers. In the report before referred to Superintendent Lane says: "As the number of inexperienced teachers increased, it was deemed best to give them some professional training in addition to their cadet practice." In September, 1893, a training class for cadets was organized. Graduates of the four years' high school course were admitted after passing the required examination. The course covered half a year. In 1895 it was decided to make the course one year, and the class which graduated in June, 1896, received a year's instruction in the training school. The extension of the course to one year was a decided step in a forward direction, and demonstrated beyond all question that the idea of building up a professional training school for teachers had become firmly established. It is true it was not established without a struggle, but the objections had been met, and had been overruled. The thanks of the people of Chicago are due to those who, with courage and persistence, contended for the idea of training for teachers. In connection with the idea of extending the course at the training school for cadets there had also grown up the opinion that the work should be broadened in many directions, and that it was about time to establish a great Normal School for the City of Chicago. Just at this time came the proposition from

the County Commissioners of Cook County to turn over to the City of Chicago, on certain conditions, the land, building and equipment belonging to the Cook County Normal School. In January, 1896, by an agreement with the County Commissioners of Cook County, the Board of Education assumed control of the Normal School, and by this act advanced the school system of Chicago on lines of progress by many years.

Soon after the school passed under the control of the Board of Education a new committee, known as the Committee on Normal School, was appointed by the Board, this committee to have the general supervision and management of the school, subject to the action of the Board. Four of the members appointed on the committee at that time have remained members up to the present. Under the agreement with Cook County the school was continued as it was then going until July 1, 1896. At once your committee was confronted with the question of the future administration of the school, and it was decided that it would be well to make a thorough investigation into the whole matter, in order to determine whether the faculty and methods of the school should be continued. The committee went into the subject, listened to arguments for and against, and when the first of July, 1896, arrived, recommended to the Board of Education that the faculty of the school be continued to work out the problem of the training of teachers. It was necessary to make various additions to the staff. A num-

ber of teachers from the city schools and from outside the city were added to the corps of instructors.

In reaching its conclusions the committee felt that many new problems would present themselves to the faculty, but it believed that with the experience which this faculty had gained in its previous work it would be well able to meet the problems and make the necessary adjustments. The Cook County Normal School had gained a national—yes, even an international—reputation. For many years its staff of instructors, under the leadership of Col. Francis W. Parker, had been at work endeavoring to develop methods for the training of teachers. By securing this school the City of Chicago gained a body of instructors experienced in Normal School work. The new problem was by no means an insignificant one. Here was a great school system, with a corps of five thousand teachers, charged with the education of a quarter of a million of children. Here were all conditions and opinions gathered together. The task was to prepare four hundred young men and women each year to stand before these children and be a help and an inspiration to them in their school work. From the very beginning the faculty of the school settled down with devotion and earnestness to accomplish this. To those who, like your committee, watched the development of the students from week to week and from month to month it was very evident that they were gaining valuable experience for their future work. At the end of the year your committee felt that the faculty of the school had with ability and enthusiasm ad-

dressed itself to its task. It is true that not all had been done which it was hoped could be done. It is true that there had been a struggle to carry on the work in quarters illy adapted to the purposes for which they were used. It is true that the opportunities for practice were too limited. Yet, despite these difficulties, great progress was made.

From the day on which the school passed under the control of the Board of Education the efforts of your committee were constantly bent towards furthering as rapidly as possible the consolidation of this school with the school system of the city, and as we look back upon the past year it is astonishing to find how complete the amalgamation has been. During the year the Superintendent, the Assistant Superintendents, the various Supervisors of special departments have visited the school and delivered addresses to the students on questions relating to the practical work of the schools. The members of the faculty of the Normal School have been in demand at teachers' institutes and before teachers' meetings. In fact, as the end of the year approached it was very evident that differences of opinion as to the methods to be employed in the Normal School were being gradually harmonized, that the school had been accepted by the teachers and the people of Chicago as a part of our school system, and that all were ready to unite to make it as strong as possible. The good that could be accomplished by a great Normal School had been recognized throughout the city's schools. The Normal School had recognized the great work to be ac-

complished, and had bent its energies to meet the demand.

It will thus be seen that during the past year the City of Chicago has made great progress in developing a professional school for the training of teachers. And this progress must be maintained. There must be no retreat. The history of Chicago's failure in her efforts to dispense with or minimize special training demonstrates that there must be no retreat. After we have traveled over the entire ground we always come back to the question of the teacher. Of what value are our beautiful buildings, our splendid equipments, all the modern improvements which are used in the construction of our buildings, if we do not emphasize the fundamental factor, the teacher? These children in our schools are entitled to the best we can give, and what better can we give them than teachers equipped in mind and heart for their calling? No profession demands so much as that of the teacher. To study the child and his development, to aid in bringing out the individual life, to be a factor in building up character—these require a personality and a training required in no other field of work. Disposition, broad culture, a special training which makes one rich in resources—these are the qualifications which the child has the right to expect. Upon the Board of Education rests the responsibility for giving to the children the best possible opportunities, and in the attainment of this end no factor is more important than the Normal School.

In conclusion we wish to thank the Board for its support of the plans of this committee and of the work of the school.

Respectfully submitted,

JOSEPH W. ERRANT,
WILLIAM R. HARPER,
EVELYN A. FRAKE,
D. R. CAMERON,
P. F. PETTIBONE,

Committee on Normal School.



REPORT OF THE COMMITTEE ON COMPULSORY EDUCATION.

To the Board of Education of the City of Chicago:

The work of redemption of the truant and negligent element of our school population offers so many opportunities for the study of sociological conditions that your Committee on Compulsory Education, conscious of the good accomplished, volunteer the assertion that this branch of the educational department of our city government merits increasing encouragement.

The imperative necessity of making "an injury to one the concern of all" has inspired your committee to bestir themselves in order that truancy may be minimized.

Business depression, so prevalent during the past few years, has impeded the work of the department somewhat because of distressing circumstances attending many of the cases investigated, but with reviving hopes in commercial centres and more perfect arrangements for enforcing our regulations we confidently believe that almost all children can be brought to school and kept there.

The greatest difficulty heretofore has been in a defective

law. Evidence to convict negligent parents has not been easy of access. The recent legislature, however, remedied some of these defects, and now mandatory features have supplemented evasive provisions.

It has been optional with Boards of Education in our state as to whether a department of compulsory education should be maintained. Now there is a strict requirement in this regard, and we herewith present the section of the statute in force which makes it possible to institute legal proceedings against offending parents or guardians:

The Board of Education shall appoint, at the time of election or appointment of teachers each year, one or more truant officers, whose duty it shall be to report all violations of this act to said board of education, and to enter complaint against and prosecute all persons who shall appear to be guilty of such violation. It shall also be the duty of said truant officers, so appointed, to arrest any child of school-going age that habitually haunts public places and has no lawful occupation, and also any truant child who absents himself or herself from school, and to place him or her in charge of the teacher having charge of any school where said child is by law entitled to attend, and which school shall be designated to said officers by the parent or guardian of said child. It is further provided in this Act that the offender, upon conviction, shall stand committed until the fine of from one to five dollars and costs are paid.

With our compulsory education department, therefore, strengthened by law and upheld by the Board of Education, we can expect more gratifying results. As it is, we are to be congratulated upon the work accomplished, as shown by the following comparisons:

| | Investigations. | Returned to School. |
|-------------|-----------------|---------------------|
| 1894-5..... | 11,878 | 3,732 |
| 1895-6..... | 13,191 | 4,690 |
| 1896-7..... | 13,990 | 5,626 |

These figures speak for themselves; they are the neatest

compliment the truant officers could receive, and we commend them to the Board of Education for their diligence, despite defective laws practically preventing them from enforcing our regulations.

Two years ago our Superintendent of Compulsory Education urged and recommended in his report the great need of a school or an institution where incorrigible children might be placed and kept, and there to be educated, but the last legislature failed to provide for the establishment of any such institution, and in consequence the only place in the city offering any asylum for this class is the John Worthy Manual Training School, which in its present condition fails to meet all requirements, the young boys now committed being housed with the older criminals. A dormitory should be built without delay, thus providing the separation so necessary for the boys' improvement. This feature, together with the benefit derived from manual training, will in some measure assist in solving the question of efficient compulsory education, and with the co-operation of the city authorities, the police department, and police justices, a great many boys could be redeemed that are now addicted to truancy and crime.

The annual report of the work accomplished in the Department, under the supervision of Dr. Theodore J. Bluthardt, is herewith presented:

| | |
|---------------------------|--------|
| Total investigations..... | 13,990 |
| From schools..... | 10,852 |
| From office..... | 361 |

| | | |
|--------------------------------------|--------|--------|
| From other sources..... | 1,182 | |
| Found by agents..... | 1,595 | |
| Total..... | | 13,990 |
| Truants..... | 2,405 | |
| Non-attendants..... | 11,585 | |
| | | 13,990 |
| Returned to public schools..... | 6,482 | |
| Returned to private schools..... | 80 | |
| | | 6,562 |
| Truants..... | 1,651 | |
| Non-attendants..... | 4,911 | |
| | | 6,562 |
| Found attending public schools..... | 449 | |
| Found attending private schools..... | 541 | |
| | | 990 |
| Total in public schools..... | 6,931 | |
| Total in private schools..... | 621 | |
| Total..... | | 7,552 |

Causes and excuses for others:

| | | |
|---|-------|--------|
| Working out (compelled to earn a living)..... | 395 | |
| Working home (to assist in housework)..... | 242 | |
| Kept at home (temporarily, for such causes as clothes not in readiness, illness or death in family, etc.).. | 778 | |
| Taught at home (by tutor or parent)..... | 17 | |
| Poverty (in need of relief)..... | 554 | |
| Physically disqualified (afflicted with St. Vitus dance, epileptic fits, etc.)..... | 34 | |
| Left city..... | 198 | |
| Illness (serious complaints)..... | 847 | |
| Not found or moved (having left district)..... | 1,875 | |
| Over or under age (over 14 or under 6)..... | 687 | |
| Not vaccinated (parents object to vaccination or neg- lect having it done)..... | 64 | |
| Indifference (parents' carelessness cause of absence) | 191 | |
| Incorrigible (fit only for truant school)..... | 152 | |
| Other causes (having just moved into district, no vac- cination certificate, running the streets, etc.)..... | 404 | |
| | | 6,438 |
| | | 13,990 |

RECAPITULATION.

| | | |
|-------------------------------|-------|-------|
| Placed in public school..... | 5,626 | |
| Placed in private school..... | 40 | |
| Total..... | | 5,666 |

COMMITTEE ON COMPULSORY EDUCATION. 159

| | |
|--|-------------|
| Permits for work (for stores and offices, only) from September 1, 1896, to July 1, 1897: | |
| Permits granted | 413 |
| Permits refused | 219 |
| Special cases reported at office requiring individual attention and disposition | 137 |
| Expense of department from July 1, 1896, to June 30, 1897: | |
| Salaries—Superintendent, clerk, sixteen agents, including printing | \$15,548 36 |
| Expense per capita as per investigations (13,990) | 1 11 |

Respectfully submitted,

ELLA G. HULL,

THOMAS BRENNAN,

EVELYN A. FRAKE,

A. S. TRUDE,

JOHN F. WOLFF,

Committee on Compulsory Education.

APPENDIX.

SCHOOL SITES—LOCATION, SIZE, VALUE OF LOTS AND IMPROVEMENTS.

| SCHOOLS. | LOCATION. | When Erected. | No. of Sittings. | Size of Lot. | Value of Lot. | Value of Furniture and Improvements. | Total Value. |
|-------------------------------------|---|---------------|------------------|-----------------|---------------|--------------------------------------|--------------|
| English High and Man. Training | Nos. 126-128 S., Jefferson St. | 1887 | 559 | 240 x 594 | Rented. | \$ 32,000 | \$ 32,000 |
| Englewood High..... | Stewart Av. to Princeton Av., bet. Chestnut St. and Englewood Av..... | 1887 | 559 | 240 x 594 | | 73,200 | 116,400 |
| Hyde Park High..... | Kimbank Av., w. f., bet. 55th and 56th Sts..... | 1894 | 938 | 250 69 x 175.66 | \$ 43,200 | 141,950 | 166,950 |
| Jefferson High..... | N. E. cor. Washington and St. Johns Sts..... | 1883 | 177 | 270 x 250 | 8,100 | 26,000 | 34,100 |
| Lake High..... | N. E. cor. Winter St. and W. 47th Pl..... | 1886 | 420 | 125 x 217.15 | 13,020 | 55,050 | 68,070 |
| Lake View High..... | N. E. cor. Ashland and Graceland Aves..... | 1886 | 580 | 342 x 160.35 | 25,440 | 63,715 | 91,155 |
| North Division High..... | N. E. cor. Wendell and Wells Sts..... | 1883 | 636 | 320 55 x 108.95 | 36,460 | 70,400 | 106,860 |
| Northwest Division High..... | N. E. cor. N. Claremont and Potomac Aves..... | 1892 | 763 | 268.5 x 124 | 16,110 | 134,640 | 150,750 |
| South Division High..... | N. E. cor. 26th St. and Wabash Av..... | 1884 | 870 | 181.15 x 157.08 | 54,980 | 93,900 | 148,880 |
| West Division High..... | S. E. cor. Congress St. and Ogden Av..... | 1885 | 1,245 | 267 x 173.3 | 51,250 | 166,550 | 217,800 |
| Adams..... | Townsend St., w. f., bet. Chicago Av. and Locust St..... | 1896 | 1,018 | 265 x 125.31 | 70,000 | 88,550 | 158,550 |
| Agassiz..... | S. W. cor. Diversey and Seminary Aves..... | 1877 | 779 | 400 x 120 | 37,500 | 20,200 | 57,700 |
| Agassiz Addition..... | N. E. cor. Wrigwood Av. and Orchard St..... | 1888 | 472 | ..... | ..... | 37,500 | 75,200 |
| Alcott..... | N. E. cor. 104th and Charles Sts..... | 1883 | 997 | 250 x 150 | 45,000 | 41,000 | 86,000 |
| Alice L. Barnard..... | N. E. cor. Hubbard and W. 50th Sts..... | 1893 | 864 | 380 x 210 | 6,300 | 73,000 | 79,300 |
| Amerson Br. of Henry H. Nash..... | N. E. cor. Lincoln and Division Sts..... | 1882 | 291 | 175 x 120 | 4,200 | 5,300 | 9,500 |
| Amerson Annex..... | S. E. cor. Clark and N. 50th Sts..... | 1885 | 810 | 315.5 x 109.08 | 31,500 | 700 | 32,200 |
| Andersen..... | S. W. cor. Clark and N. 50th Sts..... | 1883 | 726 | 117.48 x 323 | 11,300 | 56,000 | 67,300 |
| Andersen Addition..... | Sholto St., e. f., from Good to Better Sts..... | 1888 | 243 | 100.44 x 168.76 | 29,200 | 9,200 | 38,400 |
| Andersenville, Br. W. C. Goudy..... | S. E. cor. Armour and W. Ohio Sts..... | 1891 | 900 | 170 x 150 | 17,000 | 49,500 | 66,500 |
| Andrew Jackson..... | N. E. cor. Burling and Center Sts..... | 1879 | 800 | ..... | ..... | 31,500 | 88,000 |
| Armour Street..... | Butler St., w. f., bet. 80th and 81st Sts..... | 1893 | 436 | 198 x 124 | 27,600 | 58,200 | 85,800 |
| Armour Street Addition..... | N. E. cor. Cornelia St. and Hoyne Av..... | 1884 | 810 | 109.08 x 295.6 | 5,000 | 34,200 | 39,200 |
| Arnold..... | N. E. cor. Noble Av. s. f., bet. Paulina St. and Ashland Av..... | 1891 | 454 | 264 x 175 | 8,340 | 72,700 | 81,040 |
| Auburn Park..... | Noble Av. s. f., bet. Paulina St. and Wellington Aves..... | 1894 | 963 | 254.1 x 133 | 12,300 | 88,950 | 101,250 |
| Audubon..... | S. E. cor. Milwaukee Av. and Diversey St..... | 1896 | 1,162 | 297.25 x 123.25 | 8,300 | 42,350 | 50,650 |
| Augustus H. Burley..... | S. E. cor. Milwaukee Av. and Diversey St..... | 1895 | 505 | 228.8 x 291.8 | 7,800 | 11,000 | 18,800 |
| Avondale..... | Maplewood Av., e. f., bet. Waukusa and North Aves..... | 1880 | 180 | 223 x 125 | 8,600 | 80,700 | 89,300 |
| Avondale Branch..... | Sangamon St., w. f., bet. 60th and 61st Sts..... | 1892 | 1,012 | 298.5 x 125.75 | 11,400 | 81,950 | 93,350 |
| Bancroft..... | N. W. cor. Hirsch St. and N. 41st Ct..... | 1892 | 1,002 | 192 x 125.75 | 6,300 | 9,225 | 15,525 |
| Beale..... | S. W. cor. Leavitt St. and Belle Blaine Av..... | 1894 | 218 | 225 x 124.16 | 6,750 | 12,200 | 18,950 |
| Beaubien..... | | 1893 | 216 | | | | |
| Belle Plaine Avenue..... | | | | | | | |

SCHOOL SITES—LOCATION, SIZE, VALUE OF LOTS AND IMPROVEMENTS—CONTINUED.

| SCHOOLS. | LOCATION. | When Erected | No. of Sittings. | Size of Lot. | Value of Lot. | Value of Furniture and Im- provements. | Total Value. |
|-------------------------------|--|-----------------|---------------------|-----------------|------------------|---|-----------------|
| Bernhard Moos..... | California Av., w. f., bet. Waubansia and Bloomingdale Aves. | 1881 | 620 | 130.88 x 125.25 | \$ 6,000 | \$ 28,300 | \$ 34,300 |
| Bismarck..... | N. W. cor. McLean and Central Park Aves. | 1896 | 1,044 | 266.5 x 149.5 | 14,900 | 78,450 | 93,350 |
| Blaine..... | N. E. cor. Grace and Janssen Sts. | 1893 | 958 | 250 x 166.26 | 12,500 | 77,740 | 90,240 |
| Bowen..... | N. E. cor. 93d St. and Houston Av. | 1876 { | 481 | 140 x 171.66 | 16,370 | 76,500 | 92,870 |
| Bowmanville..... | Washington St. to Foster St., near Lincoln Av. | 1874 | 204 | 120 x 324.85 | 3,500 | 11,000 | 14,570 |
| Bratnard..... | Washington Av., n. f., west of Hoyne Av. | 1885 | 840 | 175 x 124 | 8,750 | 51,700 | 60,450 |
| Brainerd, Br. Gresham..... | Girard Av., w. f., bet. 88th and 89th Sts. | 1889 | 216 | 150 x 125 | 3,000 | 17,000 | 20,000 |
| Brenan..... | Lime St., w. f., bet. Archer Av. and 27th St. | 1884 | 810 | 275 x 109 | 13,750 | 58,500 | 72,250 |
| Brentano..... | N. Fairfield Av., w. f., bet. Shubert and Diversey Aves. | 1893 | 1,011 | 250 x 125.8 | 9,200 | 73,500 | 82,700 |
| Brighton..... | 35th St., n. f., bet. Lincoln and Robey Sts. | 1880 | 728 | 267 x 134 | 13,190 | 37,000 | 50,190 |
| Brighton Addition..... | | 1886 | 390 | | | 41,700 | 91,890 |
| Brown..... | Warren Av., s. f., bet. Hermitage Av. and Wood St. | 1857 | 520 | 232.49 x 126.3 | 34,870 | 44,100 | 126,970 |
| Brown Addition..... | | 1870 | 610 | | | 48,100 | |
| Brownell..... | Perry av., w. f., bet. 65th and 66th Sts. | 1888 | 627 | 174 x 180.8 | 15,660 | 49,500 | 65,160 |
| Bryant..... | W. 41st Pl., w. f., bet. 13th and 14th Sts. | 1894 | 542 | 250 x 125 | 9,650 | 41,600 | 51,250 |
| Buckley..... | N. E. cor. S. Hermitage Av. and 43d St. | 1873 | 389 | 285 x 126 | 8,550 | 20,700 | 29,250 |
| Burnside..... | S. W. cor. Burnside and Champlain Aves. | 1869 | 177 | 123 x 150 | 1,600 | 3,000 | 4,600 |
| Burr..... | S. W. cor. Ashland and Waubansia Aves. | 1873 | 539 | 208.65 x 209.30 | 22,000 | 38,000 | 60,000 |
| Burr Addition..... | | 1885 | 672 | | | 43,700 | 103,700 |
| Burr Addition..... | | 1897 | 776 | | | 80,980 | 184,680 |
| Burrongs..... | S. W. cor. Washienaw Av. and W. 36th Pl. | 1893 | 756 | 216.85 x 125 | 6,700 | 77,350 | 84,050 |
| Calhoun..... | N. E. cor. W. Jackson St. and Francisco Av. | 1881 | 810 | 500 x 122.7 | 29,000 | 50,000 | 79,000 |
| Calumet Avenue..... | Calumet Av., w. f., bet. 26th and 28th Sts. | 1871 | 650 | 146 x 177.75 | 29,200 | 34,010 | 63,200 |
| Carpenter..... | S. W. cor. Centre Av. and Huron St. | 1868 | 874 | 205 x 213 | 30,750 | 58,100 | 88,850 |
| Carpenter Addition..... | | 1891 | 693 | | | 64,640 | 153,390 |
| Carter..... | N. E. cor. Wabash Av. and 61st St. | 1885 | 389 | 198 x 170 | 22,000 | 33,700 | 55,700 |
| Carter Addition..... | | 1894 | 482 | | | 52,700 | 108,400 |
| Central Park..... | S. E. cor. Walnut St. and Kedzie Av. | 1881 | 810 | 209 x 150 | 16,730 | 50,000 | 66,730 |
| Chapman..... | On Englewood High School Lot. | 1892 | 736 | | | 71,000 | 71,000 |
| Charles Kozminski..... | N. E. cor. Ingleside Av. and 54th St. | 1897 | 1,080 | 213 x 158.5 | 20,000 | 86,655 | 106,655 |
| Charles Warrington Earle..... | S. E. cor. 61st St. and S. Hermitage Av. | 1897 | 580 | 225 x 124.32 | 5,000 | 45,860 | 50,860 |
| Chase..... | N. E. cor. Cornelia and Point Sts. | 1894 | 1,040 | 264 x 200 | 13,000 | 69,810 | 82,810 |
| Chicago Lawn..... | 65th St., n. f., near Homan Av. | 1880 | 173 | 300 x 300 | 12,000 | 5,580 | 17,580 |
| Clarke..... | Ashland Av., e. f., bet. 14th and Hastings Sts. | 1868 { | 1,668 | 294.3 x 144 | 35,700 | 137,000 | 172,700 |
| Colman..... | Dearborn St., w. f., bet. 46th and 47th Sts. | 1887 { | 895 | 200 x 106 | 10,000 | 56,750 | 66,750 |
| Columbus..... | Augusta St., s. f., bet. Hoyne Av. and Leavitt Sts. | 1886 | 810 | 216 x 123 | 15,120 | 58,000 | 73,120 |
| Cooper..... | W. 19th St., s. f., bet. Ashland Av. and Paulina St. | 1885 | 866 | 175 x 135 | 11,570 | 52,550 | 64,120 |
| Cornell..... | Drexel Av., e. f., bet. 75th and 76th Sts. | 1873 | 432 | 253.26 x 125 | 8,260 | 27,200 | 35,460 |
| Cornell Addition..... | | 1896 | 600 | | | 56,635 | 92,095 |

| | | | | | | | | |
|---|--|----------------------------------|-------|--------|-------------|--------|---------|---------|
| Crawford, Br. Lawndale..... | 25th St., n. f., from S. 43d Av. to S. 43d Ct..... | 1875 | 323 | 362 | x 125 | 7,270 | 28,300 | 35,500 |
| Cummings..... | Calhoun Av., e. f., bet. 107th and 108th Sts..... | 1883 | 337 | 200 | x 125 | 2,800 | 23,502 | 26,302 |
| David Swing..... | Strong St., w. f., bet. 16th and 18th Sts..... | 1895 | 965 | 192 | 32 x 123.32 | 27,000 | 60,400 | 87,400 |
| D. W. Cameron..... | S. W. cor. Potomac and Monticello Aves..... | 1897 | 1,028 | 200 | x 125 | 3,400 | 72,825 | 76,025 |
| Deaf Mute School..... | Monroe St., bet. Desplaines and Halsted Sts..... | 1860 | 100 | * | ..... | ..... | 850 | 850 |
| D. S. Wentworth..... | N. W. cor. Sangamon and 70th Sts..... | { 1890 } { 1893 } { 1896 } | 1,352 | 200 | x 125 | 6,000 | 125,410 | 131,410 |
| Dore (rebuilt in 1893)..... | W. Harrison St., bet. Halsted and Desplaines Sts..... | 1867 | 915 | 200 | x 111 | 90,000 | 48,500 | 128,500 |
| Douglas..... | S. E. cor. Forest Av. and 32d St..... | 1889 | 1,246 | 300 | x 125.45 | 60,000 | 100,280 | 160,280 |
| Drexel, Br. Hermann Raster..... | Oakley Av., w. f., bet. 64th and 65th Sts..... | 1881 | 1,08 | 122 | 15 x 123.85 | 2,500 | 4,300 | 6,800 |
| Drummond..... | S. W. cor. Clybourn Pl. and Girard St..... | 1893 | 1,083 | 241.5 | x 123 | 5,700 | 79,700 | 85,400 |
| Dummy Junction, Br. Barnard..... | Dobbin Av., e. f., bet. 98th and 99th Sts..... | 1890 | 36 | 150 | x 150.25 | 1,000 | 2,500 | 3,500 |
| Dunning Br., Wm. Penn Nixon..... | S. E. cor. W. Addison St. and N. 64th Av..... | 1895 | 216 | 157 | 9 x 165 | 1,400 | 7,800 | 9,200 |
| Eighty-third St., Br. Bradwell..... | N. E. cor. 83d St. and Houston Av..... | 1869 | 62 | 265 | 52 x 148 | 7,950 | 1,500 | 20,950 |
| Eighty-third St. Addition..... | S. E. cor. Oakley Av. and Ohio St..... | 1893 | 204 | ..... | ..... | ..... | 11,500 | ..... |
| Ellen Mitchell..... | N. E. cor. Ellis Av. and 72d St..... | 1880 | 819 | 205 | x 125 | 27,400 | 49,500 | 156,200 |
| Ellen Mitchell Addition..... | N. E. cor. Ellis Av. and 72d St..... | 1892 | 893 | 280 | x 100 | 6,900 | 79,300 | 14,100 |
| Ellis Avenue..... | Archer Av., s. e. f., bet. 49th and 50th Sts..... | 1893 | 135 | 150 | x 190 | 3,000 | 4,075 | 7,075 |
| Elston, Br. Chicago Lawn..... | S. E. cor. N. Troy St. and Elston Av..... | 1885 | 54 | 103.5 | x 74.5 | 3,500 | 1,700 | 5,200 |
| Elston Road, Br. Linne..... | Emerald Av., e. f., south of 79th St..... | 1889 | 274 | 150 | x 144.4 | 6,000 | 19,500 | 25,500 |
| Emerson..... | N. W. cor. Walnut and Paulina Sts..... | 1881 | 920 | 157 | x 119.4 | 14,900 | 52,900 | 67,800 |
| Everett..... | S. E. cor. S. Irving Av. and 34th St..... | 1892 | 1,088 | 288 | x 125 | 7,500 | 85,435 | 92,935 |
| Fallon..... | N. W. cor. Wallace and 42d Sts..... | 1880 | 635 | 200 | x 124 | 8,000 | 26,700 | 34,700 |
| Farragut..... | S. W. cor. Wallace and 42d Sts..... | 1894 | 1,092 | 300 | x 125 | 7,200 | 76,000 | 83,800 |
| Farran..... | Wabash Av., e. f., bet. 23d and 24th Sts..... | 1882 | 632 | 199.33 | x 160.3 | 20,000 | 29,640 | 49,640 |
| Fernwood..... | N. E. cor. 104th and Wallace Sts..... | 1885 | 181 | 132 | x 150 | 2,000 | 4,600 | 6,600 |
| Fifty-fifth Street, Br. Shields..... | S. E. cor. 55th and Rockwell Sts..... | 1893 | 216 | 225 | x 128.32 | 8,400 | 11,550 | 19,950 |
| Forest Glen, Br. Irving Park..... | Part of Lot 2, Caldwell's Reserve, in Section 4, 40, 13..... | 1846 | 50 | 99 | x 109 | 500 | 600 | 1,100 |
| Forest Hill, Branch Hermann Raster..... | N. E. cor. Western Av. and 79th St..... | ..... | 54 | 204 | x 132 | 2,540 | 350 | 2,890 |
| Forrestville..... | N. E. cor. St. Lawrence Av. and 45th St..... | 1892 | 420 | 220 | 43 x 126.1 | 24,600 | 46,700 | 132,700 |
| Forrestville Addition..... | N. W. cor. Union and O'Brien Sts..... | 1895 | 730 | 173 | x 200 | 21,600 | 61,400 | 83,000 |
| Foster..... | N. W. cor. Union and O'Brien Sts..... | 1857 | 338 | ..... | ..... | ..... | 31,500 | 165,900 |
| Foster Addition..... | N. E. cor. 104th and Wallace Sts..... | 1891 | 638 | ..... | ..... | ..... | 57,400 | ..... |
| Foster Addition..... | N. E. cor. 104th and Wallace Sts..... | 1896 | 702 | ..... | ..... | ..... | 55,400 | ..... |
| Franklin..... | Goethe St., bet. Wells and Sedgwick Sts..... | 1896 | ..... | 220 | x 150 | 70,500 | 147,330 | 217,830 |
| Fröbel..... | 21st St., n. f., bet. Robey St. and Horne Av..... | 1885 | 1,102 | 92 | x 150 | 13,500 | 63,200 | 76,700 |
| Fulton..... | S. W. cor. S. Hermitage Av. and 53d St..... | 1895 | 832 | 300 | x 123.5 | 4,230 | 60,490 | 64,720 |
| Gallistel Annex..... | N. E. cor. Ewing Av. and 104th St..... | ..... | 108 | 200 | x 121.5 | 5,000 | 850 | 28,300 |
| Gallistel..... | N. E. cor. S. Peoria and Henry Sts..... | 1883 | 353 | 261.35 | x 99.5 | 15,800 | 47,000 | 108,800 |
| Garfield..... | S. W. cor. Spaulding Av. and 16th St..... | 1884 | 648 | 200 | x 124.55 | 12,000 | 80,500 | 92,500 |
| George Howland..... | S. W. cor. Beiden Av. and 16th St..... | 1893 | 1,093 | 128 | x 100 | 8,960 | 54,100 | 63,060 |
| George H. Thomas..... | S. E. cor. 114th Pl. and State St..... | 1890 | 758 | 268 | x 124.44 | 8,830 | 78,775 | 87,605 |
| George William Curtis..... | S. E. cor. Hoyne and Wellington Aves..... | 1893 | 908 | 268 | x 124.73 | 8,375 | 79,280 | 87,655 |
| George Schneider..... | S. E. cor. Washington Av. and Robey St..... | 1896 | 1,080 | 192.53 | x 124.24 | 16,000 | 68,500 | 84,500 |
| Gladstone..... | S. E. cor. Washburne Av. and Rockwell St..... | 1895 | 863 | 213 | x 183.46 | 10,650 | 79,775 | 90,425 |
| Goethe..... | Rockwell St., e. f., bet. Milwaukee and Fullerton Aves..... | 1895 | 1,090 | ..... | ..... | ..... | ..... | ..... |

SCHOOL SITES—LOCATION, SIZE, VALUE OF LOTS AND IMPROVEMENTS—CONTINUED.

| SCHOOLS. | LOCATION. | When Erected. | No. of Sittings. | Size of Lot. | Value of Lot. | Value of Furniture and Improvements. | TOTAL VALUE. |
|------------------------------------|---|---------------|------------------|-----------------|---------------|--------------------------------------|--------------|
| Goodrich..... | S. E. cor. Taylor and Sangamon Sts..... | 1890 | 1,237 | 214 x 100 | \$ 32,700 | \$100,510 | \$132,510 |
| Graham..... | N. W. cor. 45th and Winter Sts..... | 1896 | 632 | 300.75 x 124 | 21,000 | 26,000 | 103,400 |
| Graham Addition..... | Wilcox Av., n. f., bet. Western and Campbell Aves..... | 1890 | 637 | 204 x 122 | 16,920 | 58,400 | 74,970 |
| Grant..... | S. E. cor. Milwaukee Av. and Irving Park Blvd..... | 1885 | 818 | 94 x 156 | 5,000 | 8,000 | 13,000 |
| Greeley..... | N. E. cor. Sheffield Av. and Grace St..... | 1894 | 108 | 158 x 210 | 19,400 | 70,030 | 89,430 |
| Greene..... | N. E. cor. Paulina and 36th Sts..... | 1895 | 738 | 242.3 x 142 | 9,100 | 78,925 | 88,025 |
| Greenwood Avenue..... | S. E. cor. Greenwood Av. and 46th St..... | 1893 | 1,050 | 200.5 x 125.15 | 32,490 | 79,500 | 111,960 |
| Gresham..... | S. E. cor. 85th and Green Sts..... | 1886 | 908 | 187.36 x 185 | 4,500 | 12,000 | 16,500 |
| Gresham Addition..... | Cornelia St., s. f., bet. Marshallfield Av. and Paulina St..... | 1895 | 152 | 225 x 126.6 | 4,500 | 40,900 | 45,400 |
| Hamilton..... | W. 21st Pl., n. f., bet. California Av. and Southwest Blvd..... | 1888 | 482 | 266 x 175 | 18,925 | 42,400 | 61,325 |
| Hammond..... | N. E. cor. Princeton Av. and Swann St..... | 1890 | 808 | 200 x 125 | 5,200 | 76,500 | 81,700 |
| Hancock..... | Grand Av., w. of and near W. 54th St..... | 1885 | 1,050 | 101.5 x 354.05 | 15,300 | 7,400 | 22,700 |
| Hancock Addition..... | 33d Pl., n. f., bet. Princeton and Wentworth Aves..... | 1877 | 693 | 200 x 150 | * | 42,650 | 43,650 |
| Hanson Park, Br. Wm. P. Nixon..... | Armour Av., w. f., near Root St..... | 1886 | 324 | 175 x 125 | 11,375 | 73,970 | 85,345 |
| Harrison..... | Harmon Av., w. f., bet. 75th and 76th Sts..... | 1885 | 600 | 78 x 104 | 5,270 | 42,000 | 47,270 |
| Hartigan..... | Wabash Av., e. f., bet. 14th and 16th Sts..... | 1889 | 282 | 25.50 x 125 | 5,000 | 20,300 | 25,300 |
| Harvard..... | School St., s. f., bet. Seminary and Clifton Aves..... | 1885 | 1,080 | 100 x 160.6 | 150,000 | 81,700 | 231,700 |
| Haven..... | Leavitt St., e. f., bet. Walnut and Fulton Sts..... | 1886 | 819 | 263.3 x 159 | 18,430 | 39,000 | 57,430 |
| Hawthorne..... | N. E. cor. Lewis St. and Garfield Av..... | 1895 | 432 | 267 x 140 | 26,700 | 47,650 | 74,350 |
| Hawthorne Addition..... | Wallace St., w. f., bet. 30th and 31st Sts..... | 1885 | 917 | 195 x 125 | 20,000 | 48,500 | 68,500 |
| Hayes..... | N. E. cor. Thomas and 48th Sts..... | 1875 | 756 | 222.5 x 125.16 | 14,140 | 36,460 | 50,600 |
| Headley..... | S. E. cor. Shields Av. and 43d St..... | 1895 | 782 | 308.5 x 124.66 | 7,700 | 51,880 | 59,580 |
| Headley Addition..... | N. E. cor. 133d St. and Superior Av..... | 1890 | 408 | 198 x 124 | 11,880 | 39,500 | 51,380 |
| Hedges..... | S. E. cor. Erie and W. 49th Sts..... | 1886 | 632 | 264.77 x 185.82 | 17,500 | 38,650 | 56,150 |
| Hendricks..... | N. E. cor. Wood and 70th Sts..... | 1896 | 400 | 210 x 120.55 | 6,000 | 81,745 | 87,745 |
| Henry Clay..... | S. E. cor. Armitage and Tripp Aves..... | 1882 | 1,136 | 200 x 124.7 | 3,600 | 42,200 | 45,800 |
| Henry H. Nash..... | W. 4th Pl., s. f., bet. Aberdeen St. and Centre Av..... | 1883 | 432 | 100 x 125 | 3,000 | 3,000 | 6,000 |
| Hermann Raster..... | N. E. cor. Loomis and 31st Sts..... | 1887 | 152 | 75 x 125.9 | 1,875 | 1,300 | 3,175 |
| Hermosa..... | Morgan St., w. f., bet. 55th and 56th Sts..... | 1887 | 894 | 100 x 330 | 25,000 | 46,400 | 71,400 |
| Holmes..... | N. E. cor. 37th St. and Princeton Av..... | 1893 | 912 | 232.2 x 124.67 | 10,440 | 86,850 | 97,290 |
| Holmes Mann..... | S. W. cor. Huron and Franklin Sts..... | 1894 | 962 | 192 x 125 | 12,460 | 78,100 | 90,560 |
| Huron Street..... | S. W. cor. Huron and Franklin Sts..... | 1881 | 880 | 162 x 100 | 32,900 | 41,300 | 74,200 |
| Irving..... | Lexington St., s. f., bet. Leavitt St. and Hoyne Av..... | 1881 | 638 | 192 x 125 | 14,400 | 60,800 | 75,200 |
| Irving Park..... | N. 41st Av., w. f., bet. W. Byron and W. Grace Sts..... | 1884 | 993 | 250 x 174 | 7,500 | 15,000 | 22,500 |
| Irving Park..... | N. 41st Av., w. f., bet. W. Byron and W. Grace Sts..... | 1870 | 328 | | | | |

| | | | | | | |
|---|------|--------|-----------------|---------|---------|---------|
| Jackson Park, Br. Ray..... | 1889 | 210 | 47.04 x 164.15 | 5,900 | 17,600 | 23,500 |
| Jefferson..... | 1884 | 777 | 200.3 x 104.5 | 16,020 | 57,380 | 73,410 |
| Jefferson Park..... | 1875 | 314 | 101.04 x 126.43 | 3,000 | 12,200 | 16,200 |
| J. N. Thorp..... | 1886 | 1,020 | 125 x 140 | 8,400 | 82,890 | 91,290 |
| James R. Doolittle, Jr..... | 1881 | 818 | 220 x 231 | 55,000 | 48,500 | 48,500 |
| James R. Doolittle, Jr., Add..... | 1885 | 528 | | | 43,100 | 146,600 |
| James W. Scott..... | 1880 | 518 | 193.12 x 166.64 | 25,000 | 27,550 | 52,550 |
| John Ererar..... | 1892 | 845 | 268.6 x 125 | 25,520 | 78,500 | 104,020 |
| John Ericsson..... | 1883 | 1,098 | 225 x 154 | 17,940 | 72,540 | 90,180 |
| J. L. Marsh..... | 1882 | 362 | 203.58 x 188.5 | 4,000 | 16,850 | 20,850 |
| John M. McLaren..... | 1886 | 1,017 | 150 x 125 | 16,500 | 70,270 | 86,770 |
| John M. Smyth..... | 1897 | 1,167 | 192 x 107 | 27,200 | 81,595 | 108,795 |
| John Wortly..... | 1895 | 168 | | | 75,220 | 75,220 |
| Jones..... | 1875 | 669 | 175 x 100 | 219,430 | 268,430 | 268,430 |
| Keith..... | 1883 | 810 | 200 x 122.1 | 15,000 | 64,000 | 79,000 |
| Kelwyn Grove, Br. W. I. Nixon..... | 1874 | 108 | 175 x 125 | 2,600 | 10,200 | 12,800 |
| Kensington..... | 1870 | Leased | 80 x 241.7 | 6,500 | | 6,500 |
| | | | 36.2 x 253.2 | | | |
| Kenwood..... | 1889 | 544 | 240 x 280.2 | 74,000 | 45,000 | 114,500 |
| Kershaw..... | 1885 | 901 | 281 x 134.6 | 17,680 | 52,000 | 137,730 |
| Kershaw Addition..... | 1883 | 621 | | | 68,100 | |
| King..... | 1873 | 998 | 196 x 158 | 19,600 | 66,635 | 86,235 |
| Kinzie..... | 1872 | 500 | 199.1 x 100 | 54,750 | 28,800 | 83,550 |
| Knickerbocker..... | 1892 | 1,016 | 200 x 124 | 12,000 | 78,450 | 90,450 |
| Komensky..... | 1891 | 926 | 122 x 125.5 | 12,200 | 64,300 | 76,500 |
| Kosciusko..... | 1875 | 696 | 149 x 125 | 18,625 | 38,800 | 57,425 |
| La Fayette..... | 1893 | 1,108 | 366.30 x 124.68 | 12,250 | 77,800 | 90,050 |
| Lake View No. 5, Br. of George Schneider..... | 1885 | 104 | 250 x 125 | 17,500 | 3,500 | 21,000 |
| Langland..... | 1884 | 693 | 144 x 100 | 5,760 | 49,600 | 55,360 |
| La Salle..... | 1882 | 813 | 200 x 125.5 | 20,000 | 52,950 | 72,950 |
| La Salle Addition..... | 1893 | 342 | | | 37,350 | 110,300 |
| Lawndale..... | 1882 | 410 | 200 x 124.87 | 10,000 | 32,200 | 42,200 |
| Lewis..... | 1874 | 698 | | | 36,150 | 36,150 |
| Lily Dale, Br. Burnside..... | 1876 | 35 | 220 x 100 | 1,800 | 500 | 2,300 |
| Lincoln..... | 1870 | 816 | 132.5 x 297 | 41,375 | 49,000 | 133,585 |
| Lincoln Addition..... | 1894 | 532 | | | 43,210 | |
| Linne..... | 1895 | 432 | 216.3 x 125.7 | 5,400 | 35,075 | 40,475 |
| Logan..... | 1889 | 893 | 216 x 100 | 7,560 | 62,000 | 69,560 |
| Longfellow..... | 1882 | 756 | 160 x 125.5 | 16,000 | 54,200 | 70,200 |
| Longwood, Br. Alice L. Barnard..... | 1878 | 72 | 200 x 225 | 7,000 | 3,800 | 10,800 |
| Louis Nettelhorst..... | 1879 | 218 | 89.76 x 354.72 | 50,700 | 6,400 | 132,500 |
| Louis Nettelhorst Addition..... | 1893 | 998 | 116.4 x 125 | | 75,400 | |
| Lowell..... | 1894 | 1,144 | 299.6 x 123.9 | 9,000 | 77,700 | 86,700 |
| Lyman Trumbull..... | 1872 | 733 | 264 x 181.05 | * | 38,500 | 82,300 |
| Lyman Trumbull Addition..... | 1878 | 636 | | | 43,800 | |
| Madison Avenue..... | 1883 | 850 | 300 x 125 | 12,000 | 45,470 | 57,470 |
| McAllister..... | 1889 | 880 | 300 x 147 | 5,700 | 66,240 | 71,940 |
| McClellan..... | 1881 | 762 | 224 x 125 | 13,000 | 49,500 | 62,500 |
| McClellan Addition..... | 1896 | 480 | | | 45,690 | 114,390 |

SCHOOL SITES—LOCATION, SIZE, VALUE OF LOTS AND IMPROVEMENTS—CONTINUED.

| SCHOOLS. | LOCATION. | When Erected. | No. of Sitings. | Size of Lot. | Value of Lot. | Value of Furniture and Improvements. | TOTAL VALUE. |
|--------------------------------------|--|----------------------|-----------------|--|---------------|--------------------------------------|--------------|
| McCosh..... | Champaign Av., w. f., bet. 65th and 66th Sts..... | 1895 | 934 | 216.25 x 121.85 | \$ 13,120 | \$ 73,000 | \$ 86,120 |
| McPherson..... | N. Lincoln St., e. f., bet. Lawrence and Leland Aves..... | 1888 1889 1894 | 660 | 200 x 152.5 | 12,000 | 58,400 | 70,400 |
| Manierre..... | Hudson Av., e. f., bet. Blackhawk and Conner Sts..... | 1885 | 954 | 175 x 124.1 | 19,950 | 60,405 | 79,655 |
| Maplewood, Br. Brentano..... | S. E. cor. Diversey and California Aves..... | 1883 | 200 | 117.5 x 125 | 5,335 | 7,000 | 12,335 |
| Mark Sheridan..... | S. E. cor. 27th and Wallace Sts..... | 1881 | 866 | 200 x 124.9 | 18,000 | 49,500 | 67,500 |
| Marquette..... | Wood St., e. f., from Harrison to Congress Sts..... | 1879 | 805 | 75 x 100 | 35,575 | 54,500 | 167,575 |
| Marquette Addition..... | Adams St., s. f., bet. Kedzie and Spaulding Aves..... | 1890 | 806 | 275.5 x 182.7 | 32,470 | 77,500 | 119,270 |
| Marshall..... | Henry St., s. f., bet. Throop and Loomis Sts..... | 1895 | 1,064 | 312.54 x 124 | 48,586 | 94,590 | 143,176 |
| Medill..... | S. W. cor. St. Lawrence Av. and 42d St..... | 1884 | 576 | 305.25 x 126 | 22,500 | 46,500 | 73,650 |
| Melville W. Fuller..... | | | 134 | | | 5,000 | |
| Melville W. Fuller Annex..... | | | | | | | |
| Mont Clare, Branch Wm. Penn..... | | | | | | | |
| Nixon..... | S. W. cor. Vine and Prospect Sts..... | 1895 | 216 | 198.91 x 200.82 | 1,600 | 9,525 | 11,125 |
| Montefiore..... | S. E. cor. Sangamon St. and Grand Av..... | 1882 | 648 | 200 x 116.1 | 30,000 | 41,800 | 104,600 |
| Montefiore Addition..... | | 1885 | 486 | | | 32,800 | |
| Monrose, Br. Irving Park..... | S. E. cor. Lawrence and N. 44th Aves..... | 1889 | 170 | 209.22 x 208.56 | 7,100 | 3,350 | 10,450 |
| Moreland, Br. Henry H. Nash..... | Ontario St., bet. W. 47th and W. 48th Sts..... | 1886 | 119 | 150 x 120.35 | 3,300 | 5,800 | 9,100 |
| Morris..... | S. E. cor. Noble Av. and Blucher Sts..... | 1896 | 1,125 | 187.24 x 132.3 | 30,500 | 80,425 | 110,925 |
| Moseley..... | N. W. cor. Michigan Av. and 24th St..... | 1856 | 685 | 200 x 179 | 120,000 | 36,300 | 198,750 |
| Moseley Addition..... | | 1875 | 693 | | | 42,450 | |
| Motley..... | N. Ada St., w. f., bet. Chicago Av. and W. Huron St..... | 1884 | 803 | 192 x 100 | 14,400 | 56,200 | 70,600 |
| Mowry Av., Br. Chicago Lawn..... | N. E. cor. Mowry and Englewood Aves..... | 1894 | 212 | 203.5 x 124.8 | 4,900 | 13,975 | 13,975 |
| Mulligan..... | Sheffield Av., w. f. bet. Clay and Willow Sts..... | 1890 | 1,032 | 192 x 125 | 10,560 | 71,000 | 81,560 |
| Myra Bradwell..... | Sherman Av., e. f., bet. 77th and 78th Sts..... | 1889 | 384 | 248.5 x 167 | 8,800 | 23,200 | 76,300 |
| Myra Bradwell Addition..... | | 1895 | 480 | | | 44,700 | |
| Newberry..... | N. W. cor. Willow and Orchard Sts..... | 1858 | 970 | 200 x 148.5 | 22,000 | 54,250 | 119,000 |
| Newberry Addition..... | | 1885 | 480 | | | 42,750 | |
| Ninety-second St., Br. AuburnPk..... | N. E. cor. 92d and Desplaines Sts..... | 1891 | 89 | 124 x 125 | 1,800 | 9,150 | 11,010 |
| Normal School..... | Bounded by North, South and West Normal Parkway and Chicago, Rock Island and Pacific Railroad..... | | 550 | 1563.95 on N. line 1156.71 on S. line | 300,000 | 16,000 | 316,000 |
| Norwood Park..... | N. E. cor. Cheney Av. and Walnut St..... | 1874 | 165 | 261.9 x 228.8 | 3,000 | 13,700 | 16,700 |
| Norwood Park Branch..... | N. E. cor. Elston and Milwaukee Aves..... | 1892 | 45 | 35 of acre | 750 | 1,350 | 2,100 |
| Nutt Avenue, Br. Madison Av..... | N. W. cor. Kimbark Av. and 50th St..... | 1894 | 180 | 161.43 x 126 | 4,840 | 9,375 | 14,215 |
| Oakdale..... | N. E. cor. Desplaines and 89th Sts..... | 1881 | 133 | 225 x 132.6 | 4,500 | 900 | 5,400 |
| Oakdale..... | S. E. cor. 40th St. and Cottage Grove Av..... | 1874 | 636 | 150 x 150 | 50,000 | 31,800 | 81,800 |
| Oakley Avenue, Br. Shields..... | N. E. cor. Oakley Av. and 51st St..... | 1886 1893 | 114 | 231 x 132 | 6,930 | 1,650 | 8,580 |
| Oak Ridge..... | Prairie Av., w. f., bet. 52d and 53d Sts..... | 1882 | 594 | 200 x 179.75 | 20,000 | 44,595 | 64,595 |
| Oak Street..... | N. E. cor. Oak St. and Milton Av..... | 1880 | 664 | 100 x 168.5 | 17,500 | 41,300 | 58,800 |

| | | | | |
|---|------|-------|-----------------|--------|
| Ozden | 1884 | 1,008 | 178.5 x 106.5 | 30,000 |
| N. E. cor. Bishop and 46th Sts. | 1880 | 634 | 212.1 x 124.25 | 8,500 |
| S. E. cor. 51st St. and Princeton Av. | 1876 | 546 | 215.1 x 161.7 | 15,050 |
| Parkman Addition. | 1890 | 623 | | 45,600 |
| N. E. cor. 71st St. and Rhodes Av. | 1889 | 408 | 250 x 125 | 10,000 |
| Parkside. | 1888 | 594 | 162.53 x 189 | 9,720 |
| N. W. cor. 70th St. and Seipp Av. | 1894 | | | 51,150 |
| N. E. cor. 74th St. and Jeffery Av. | 1894 | 96 | 190 x 115.8 | 5,260 |
| Augusta St., s. f., bet. Noble St. and Ashland Av. | 1894 | 874 | 202 x 124.3 | 27,000 |
| N. W. cor. May and 66th Sts. | 1885 | 1,126 | 196.82 x 124.57 | 4,900 |
| S. E. cor. Escanaba Av. and 90th St. | 1888 | 576 | 330 x 138.5 | 21,560 |
| Phil Sheridan Addition | 1896 | 480 | | 44,300 |
| Pickard | 1896 | | | 65,195 |
| S. W. cor. 21st Pl. and Oakley Av. | 1874 | 1,030 | 199.85 x 125 | 10,800 |
| Polk St., s. f., bet. Halsted and Desplaines Sts. | 1871 | 682 | 150.5 x 120 | 37,625 |
| N. W. cor. Wrightwood and Ashland Aves. | 1881 | 664 | 266 x 175 | 19,950 |
| Leavitt st., bet. Coblenitz and Lub-ck sts. | 1896 | 918 | 216 x 100 | 9,390 |
| S. W. cor. Paulina St. and Montrose Blvd. | 1872 | 418 | 292.5 x 165 | 18,050 |
| Ravenswood Addition. | 1893 | 636 | | 62,075 |
| N. E. cor. 57th St. and Monroe Av. | 1887 | 800 | 175.84 x 198.97 | 35,895 |
| N. W. cor. 122d St. and Muskegon Av. | 1879 | 660 | 75 x 125 | 2,200 |
| S. E. cor. Wabash Av. and Eda St. | 1886 | 411 | 132 x 162.8 | 43,020 |
| S. E. cor. Humboldt and Cortland Aves. | 1896 | 1,196 | 50 x 174.8 | 40,300 |
| S. W. cor. Leyden and Indiana Aves. | 1870 | 173 | 219.42 x 310 | 8,050 |
| W. 13th St., s. f., bet. Centre Av. and Throop St. | 1880 | 674 | 220-triangle } | 2,500 |
| S. E. cor. N. Ashland and Greenleaf Aves. | 1890 | 302 | 175 x 124 | 10,000 |
| N. E. cor. Lunt Av. and N. Robey St. | 1890 | 296 | 221.7 x 175.15 | 8,160 |
| N. Clark St., e. f., north of Peterson Av. | 1881 | 192 | 200.4 x 172 | 7,850 |
| S. W. cor. Michigan Av. and 103d St. | 1879 | 104 | 200.4 x 200 | 9,500 |
| S. W. cor. Lawndale Av. and Huron St. | 1890 | 1,022 | 163.35 x 202 | 4,000 |
| S. E. cor. Morgan and Monroe Sts. | 1880 | 922 | 100 x 132 | 1,750 |
| Clark St., w. f., bet. 117th and 118th Sts. | 1888 | 339 | 99 x 117.89 } | 2,000 |
| Veeder St., s. f., bet. Halsted and Vine Sts. | 1893 | 660 | 300 x 125.36 | 4,400 |
| S. W. cor. S. Hermitage Av. and 46th St. | 1894 | 1,009 | 150 x 118 | 30,000 |
| S. W. cor. State and Elm Sts. | 1874 | 679 | 325 x 120.5 | 25,640 |
| Morgan St., e. f., bet. 51st and 52d Sts. | 1884 | 439 | | 40,800 |
| S. E. cor. 57th St. and Princeton Av. | 1887 | 690 | 153.54 x 216.8 | 86,200 |
| N. W. cor. 43d and Rockwell Sts. | 1893 | 533 | | 15,350 |
| N. E. cor. Jackson Blvd. and Aberdeen St. | 1879 | 284 | 242.5 x 124.7 | 9,270 |
| N. W. cor. 1st and Wabash Av. | 1859 | 1,104 | 287.32 x 247.52 | 8,000 |
| S. E. cor. 93d St. and Stony Island Av. | 1874 | 581 | 145 x 189 | 8,950 |
| W. 43d St., w. f., bet. Colorado Av. and Harrison St. | 1887 | 166 | 160.6 x 142.75 | 16,925 |
| N. E. cor. Ohio and Lincoln Sts. | 1894 | 864 | 125 x 150 | 24,000 |
| Sixth Av., w. f., bet. 99th and 100th sts. | 1871 | 648 | 125 x 125.82 | 7,300 |
| Taylor Addition. | 1896 | 418 | 275 x 125.82 | 11,000 |
| Taylor Addition. | 1881 | 192 | 216 x 123.7 | 77,900 |
| Taylor Addition. | 1894 | 406 | 100 x 125 | 33,300 |
| Taylor Addition. | 1894 | | | 37,910 |
| Taylor Addition. | 1894 | | | 16,000 |
| Taylor Addition. | 1894 | | | 53,500 |
| Taylor Addition. | 1894 | | | 32,900 |

| | | | | | |
|--|---------|----------|-----------|------------|------------|
| N. E. cor. Fair Av. and 11 th St. | 175 | x 175 | 3,000 | ..... | 3,000 |
| N. W. cor. 95th and Leavitt Sts. | 44 | x 123 | 400 | ..... | 400 |
| S. Elizabeth St., south of W. 100th Pl. | 25 | x 125 | 250 | ..... | 250 |
| Marlin St., e. f., north of 107th St. | 100 | x 125 | 1,500 | ..... | 1,500 |
| Carpenter St., e. f., bet. 90th and 91st Sts. | 200 | x 127.96 | 22,000 | ..... | 22,000 |
| S. E. cor. St. Lawrence av. and 40th St. | 115.5 | x 106 | 6,000 | ..... | 6,000 |
| W. 10th St., n. f., near Douglas Park Blvd. | 201.1 | x 125.59 | 5,800 | ..... | 5,800 |
| S. E. cor. S. Maplewood Av. and 36th St. | 236.49 | x 127.1 | 4,000 | ..... | 4,000 |
| N. E. cor. S. Maplewood Av. and 36th St. | 250 | x 150 | 15,000 | ..... | 15,000 |
| Winthrop Av., e. f., bet. Ardmore and Thorndale Aves. | 297.57 | x 125 | 50,000 | ..... | 50,000 |
| N. E. cor. Orchard and Center Sts. | 176 | x 145.8 | 5,000 | ..... | 5,000 |
| N. E. cor. P.L., s. f., bet. Auburn and S. Morgan Sts. | 204 | x 140.5 | 15,000 | ..... | 15,000 |
| N. W. cor. Edgewood Av. and Catalpa Pl. | 95 | x 126 | 9,500 | ..... | 9,500 |
| N. E. cor. Warren and S. Tallman Aves. | 100 | x 160.6 | 6,000 | ..... | 6,000 |
| Harvard Av., bet. 75th and 76th Sts. | 297 | x 200 | 18,000 | ..... | 18,000 |
| N. E. cor. 81st and Butler Sts. | 235 | x 125.25 | 5,500 | ..... | 5,500 |
| N. W. cor. 91st Pl. and Langley Av. | 199.53 | x 134 | 13,900 | ..... | 13,900 |
| N. E. cor. Rebecca St. and Washtenaw Av. | 248.31 | x 125.27 | 3,000 | ..... | 3,000 |
| S. W. cor. 117th and Morgan Sts. | 249.65 | x 126.1 | 4,000 | ..... | 4,000 |
| N. W. cor. Sawyer Av. and 53d St. | 146.52 | x 146.52 | 1,000 | ..... | 1,800 |
| N. 63d Av., about 1/2 mile north of Fullerton Av. | 1883 | ..... | 30,448 | ..... | 30,448 |
| ..... | 12,752 | ..... | ..... | ..... | ..... |
| Unoccupied Br. Kelym Grove. | ..... | ..... | ..... | ..... | ..... |
| Rooms in Rented Buildings. | ..... | ..... | ..... | ..... | ..... |
| Manual Train in Gram. Schools. | ..... | ..... | ..... | ..... | ..... |
| Machinery, Tools, etc. | ..... | ..... | ..... | ..... | ..... |
| Kindergartens, Pianos, Stools | ..... | ..... | ..... | ..... | ..... |
| and Covers. | ..... | ..... | ..... | ..... | ..... |
| Grand Totals | 204,556 | ..... | 5,311,351 | 15,139,240 | 20,450,591 |

* School Fund Property.

STATEMENT SHOWING VARIOUS ITEMS OF ATTEND

| SCHOOLS. | NUMBER OF EVENINGS IN SESSION. | DATE OF OPENING OF SCHOOLS. | DATE OF CLOSING OF SCHOOLS. | TEACHERS. | | Total Enrollment. | | |
|----------------------------|-----------------------------------|---|---|---------------------------|---|-------------------|---------|--------|
| | | | | Total Number Employed. | Total Number of Evenings In- struction. | Male. | Female. | Total. |
| Englewood High..... | 76 | Nov. 9, 1896 | Mar. 5, 1897 | 7 | 509 | 190 | 86 | 276 |
| English High and Man'l Tr. | 73 | Nov. 9, 1896 | Mar. 5, 1897 | 8 | 536 | 189 | 65 | 254 |
| North Division High..... | 76 | Nov. 9, 1896 | Mar. 5, 1897 | 7 | 497 | 225 | 61 | 286 |
| Northwest Division High.. | 76 | Nov. 9, 1896 | Mar. 5, 1897 | 10 | 716 | 300 | 108 | 408 |
| Pullman High..... | 76 | Nov. 9, 1896 | Mar. 5, 1897 | 5 | 322 | 103 | 43 | 146 |
| South Chicago High..... | 76 | Nov. 9, 1896 | Mar. 5, 1897 | 5 | 390 | 120 | 52 | 172 |
| South Division High..... | 76 | Nov. 9, 1896 | Mar. 5, 1897 | 8 | 591 | 243 | 110 | 353 |
| Agassiz..... | 76 | Nov. 9, 1896 | Mar. 5, 1897 | 7 | 538 | 221 | 93 | 314 |
| Bowen..... | 76 | Nov. 9, 1896 | Mar. 5, 1897 | 5 | 230 | 129 | 24 | 153 |
| Burr..... | 76 | Nov. 9, 1896 | Mar. 5, 1897 | 10 | 814 | 398 | 55 | 453 |
| Cornell..... | 48 | Nov. 9, 1896 | Jan. 29, 1897 | 4 | 206 | 80 | 12 | 92 |
| Emerson..... | 76 | Nov. 9, 1896 | Mar. 5, 1897 | 6 | 454 | 198 | 74 | 272 |
| Franklin..... | 76 | Nov. 9, 1896 | Mar. 5, 1897 | 12 | 883 | 405 | 97 | 502 |
| Froebel..... | 76 | Nov. 9, 1896 | Mar. 5, 1897 | 11 | 777 | 321 | 64 | 385 |
| Garfield..... | 91 | Nov. 9, 1896 | Mar. 26, 1897 | 27 | 1,810 | 725 | 267 | 992 |
| Harrison..... | 76 | Nov. 9, 1896 | Mar. 5, 1897 | 7 | 524 | 206 | 52 | 258 |
| Haven..... | 76 | Nov. 9, 1896 | Mar. 5, 1897 | 7 | 546 | 274 | 57 | 331 |
| Hendricks..... | 76 | Nov. 9, 1896 | Mar. 5, 1897 | 7 | 501 | 218 | 41 | 259 |
| Holden..... | 76 | Nov. 9, 1896 | Mar. 5, 1897 | 10 | 735 | 385 | 57 | 442 |
| Montefiore..... | 76 | Nov. 9, 1896 | Mar. 5, 1897 | 8 | 532 | 249 | 41 | 290 |
| Newberry..... | 76 | Nov. 9, 1896 | Mar. 5, 1897 | 8 | 564 | 193 | 59 | 252 |
| *Newsboys' Home..... | 117 | Oct. 12, 1896 | April 9, 1897 | 1 | 93 | 79 | ..... | 79 |
| O'Toole..... | 76 | Nov. 9, 1896 | Mar. 5, 1897 | 9 | 575 | 357 | 62 | 419 |
| Perkins Bass..... | 76 | Nov. 9, 1896 | Mar. 5, 1897 | 7 | 544 | 179 | 64 | 243 |
| Pullman..... | 76 | Nov. 9, 1896 | Mar. 5, 1897 | 6 | 309 | 233 | 43 | 281 |
| Raymond..... | 76 | Nov. 9, 1896 | Mar. 5, 1897 | 7 | 496 | 277 | 110 | 387 |
| Scammon..... | 76 | Nov. 9, 1896 | Mar. 5, 1897 | 9 | 650 | 401 | 59 | 460 |
| Sherwood..... | 76 | Nov. 9, 1896 | Mar. 5, 1897 | 10 | 581 | 223 | 43 | 266 |
| Thos. Chalmers..... | 76 | Nov. 9, 1896 | Mar. 5, 1897 | 7 | 444 | 165 | 40 | 205 |
| Throop..... | 91 | Nov. 9, 1896 | Mar. 26, 1897 | 11 | 1,021 | 382 | 148 | 530 |
| Von Humboldt..... | 76 | Nov. 9, 1896 | Mar. 5, 1897 | 8 | 624 | 321 | 108 | 429 |
| *Waifs' Mission..... | ..... | Always | Open. | 2 | 183 | 121 | ..... | 121 |
| Wells..... | 91 | Nov. 9, 1896 | Mar. 26, 1897 | 16 | 1,330 | 598 | 104 | 702 |
| Totals..... | 2,487 | ..... | ..... | 272 | 19,575 | 8,713 | 2,299 | 11,012 |

* Report from Nov. 9, 1896, to March 26, 1897.

NCE AT EACH OF THE EVENING SCHOOLS.

PUPILS.

| Total Number of Evenings Attendance. | | | Average Attendance per Evening for Entire Session. | | | Average Number of Evenings Attendance for Each Pupil Enrolled. | | | Certificates Issued. | | |
|--------------------------------------|---------|---------|--|---------|---------|--|---------|--------|----------------------|---------|--------|
| Male. | Female. | Total. | Male. | Female. | Total. | Male. | Female. | Total. | Male. | Female. | Total. |
| 7,476 | 3,181 | 10,657 | 98.4 | 41.8 | 140.2 | 39.3 | 36.9 | 38.6 | 69 | 26 | 95 |
| 6,300 | 2,244 | 8,544 | 82.9 | 29.5 | 112.4 | 33.3 | 34.5 | 33.6 | 48 | 32 | 80 |
| 8,410 | 2,462 | 10,872 | 110.7 | 32.3 | 143.0 | 37.3 | 40.3 | 45.0 | 71 | 20 | 91 |
| 12,463 | 4,668 | 17,131 | 164.0 | 61.4 | 225.4 | 41.5 | 43.2 | 41.9 | 115 | 48 | 163 |
| 4,249 | 1,806 | 6,055 | 55.9 | 23.7 | 79.6 | 41.2 | 42.0 | 41.4 | 51 | 18 | 69 |
| 4,647 | 2,449 | 7,096 | 61.1 | 32.2 | 93.3 | 38.7 | 47.0 | 41.2 | 36 | 13 | 49 |
| 8,847 | 3,826 | 12,673 | 116.4 | 50.3 | 166.7 | 36.4 | 34.7 | 35.8 | 81 | 44 | 125 |
| 8,460 | 3,446 | 119.06 | 111.3 | 45.3 | 156.6 | 36.4 | 37.0 | 37.9 | 45 | 26 | 71 |
| 5,386 | 911 | 6,297 | 70.9 | 11.9 | 82.8 | 41.7 | 37.9 | 41.1 | 32 | 6 | 38 |
| 15,018 | 1,919 | 16,937 | 197.6 | 25.2 | 222.8 | 39.7 | 34.8 | 37.3 | 102 | 18 | 120 |
| 2,647 | 480 | 3,127 | 55.1 | 10.0 | 65.1 | 33.0 | 40.0 | 33.9 | ..... | ..... | ..... |
| 6,420 | 2,706 | 9,126 | 84.4 | 35.6 | 120.0 | 32.4 | 36.5 | 33.5 | 45 | 26 | 71 |
| 14,707 | 3,146 | 17,853 | 193.5 | 41.4 | 234.9 | 36.3 | 32.4 | 35.5 | 140 | 24 | 164 |
| 15,622 | 2,083 | 17,705 | 205.5 | 27.4 | 232.9 | 48.6 | 32.5 | 45.9 | 91 | 16 | 107 |
| 32,147 | 11,658 | 43,805 | 353.2 | 128.1 | 481.3 | 44.3 | 43.6 | 44.1 | 231 | 73 | 304 |
| 7,587 | 1,602 | 9,189 | 99.8 | 21.1 | 120.9 | 36.7 | 30.8 | 35.6 | 70 | 15 | 85 |
| 9,052 | 2,262 | 11,314 | 119.1 | 29.7 | 148.8 | 33.0 | 39.6 | 34.1 | 85 | 24 | 109 |
| 8,739 | 1,761 | 10,500 | 114.9 | 23.2 | 138.1 | 41.0 | 42.9 | 40.5 | 80 | 20 | 100 |
| 11,734 | 2,028 | 13,762 | 154.5 | 26.5 | 181.0 | 30.4 | 35.5 | 31.1 | 54 | 18 | 72 |
| 9,654 | 1,494 | 11,148 | 127.0 | 19.7 | 146.7 | 38.7 | 36.4 | 38.4 | 56 | 13 | 69 |
| 8,015 | 2,409 | 10,424 | 105.4 | 31.7 | 137.1 | 41.5 | 40.8 | 41.3 | 41 | 19 | 60 |
| 2,274 | ..... | 2,274 | 24.9 | ..... | 24.9 | 28.7 | ..... | 28.7 | ..... | ..... | ..... |
| 11,115 | 1,732 | 12,847 | 146.3 | 22.7 | 169.0 | 31.1 | 27.9 | 30.6 | 47 | 5 | 52 |
| 5,608 | 2,291 | 7,899 | 73.8 | 30.1 | 103.9 | 31.3 | 35.7 | 32.0 | 42 | 22 | 64 |
| 7,530 | 1,366 | 8,896 | 99.0 | 18.1 | 117.1 | 31.6 | 31.7 | 31.6 | 59 | 13 | 72 |
| 9,891 | 3,959 | 13,850 | 130.1 | 52.5 | 182.6 | 35.7 | 36.2 | 35.8 | 61 | 33 | 94 |
| 12,468 | 1,943 | 14,411 | 164.0 | 25.6 | 189.6 | 31.0 | 25.3 | 31.3 | 77 | 8 | 85 |
| 8,666 | 2,008 | 10,674 | 114.0 | 26.4 | 140.4 | 38.8 | 46.6 | 40.1 | 54 | 13 | 67 |
| 7,251 | 1,500 | 8,751 | 95.4 | 19.7 | 115.1 | 43.9 | 37.5 | 42.6 | 43 | 10 | 53 |
| 19,726 | 7,226 | 26,952 | 216.7 | 79.4 | 296.1 | 51.6 | 48.8 | 50.8 | 100 | 53 | 153 |
| 10,937 | 3,175 | 14,112 | 143.9 | 41.7 | 185.6 | 34.0 | 29.3 | 32.8 | 104 | 28 | 132 |
| 4,290 | ..... | 4,290 | 47.1 | ..... | 47.1 | 35.4 | ..... | 35.4 | ..... | ..... | ..... |
| 25,228 | 4,620 | 29,848 | 277.0 | 51.0 | 328.0 | 42.1 | 44.4 | 42.5 | 173 | 32 | 205 |
| 392,564 | 88,391 | 420,955 | 4,213.8 | 1,115.2 | 5,329.0 | 38.1 | 38.4 | 38.2 | 2,303 | 716 | 3,019 |

DURATION OF ATTENDANCE OF PUPILS ATTENDING EVENING SCHOOLS.

| SCHOOLS. | FOR 16 WEEKS AND LESS THAN 20 WEEKS. | | | FOR 12 WEEKS AND LESS THAN 16 WEEKS. | | | FOR 8 WEEKS AND LESS THAN 12 WEEKS. | | | FOR 4 WEEKS AND LESS THAN 8 WEEKS. | | | LESS THAN 4 WEEKS. | | |
|---------------------------------------|--|---------|--------|--|---------|--------|---|---------|--------|--|---------|--------|-----------------------|---------|--------|
| | Male. | Female. | Total. | Male. | Female. | Total. | Male. | Female. | Total. | Male. | Female. | Total. | Male. | Female. | Total. |
| Englewood High..... | 15 | 5 | 20 | 49 | 19 | 68 | 42 | 22 | 64 | 47 | 30 | 77 | 37 | 10 | 47 |
| English High and Manual Training..... | 21 | 11 | 32 | 54 | 10 | 64 | 47 | 10 | 57 | 72 | 26 | 98 | 21 | 8 | 29 |
| North Division High..... | 25 | 9 | 34 | 68 | 15 | 83 | 40 | 13 | 53 | 54 | 13 | 67 | 38 | 11 | 49 |
| Northwest Division High..... | 65 | 29 | 94 | 76 | 27 | 103 | 56 | 19 | 75 | 60 | 16 | 76 | 43 | 17 | 60 |
| Pullman High..... | 33 | 10 | 43 | 30 | 13 | 43 | 16 | 7 | 23 | 19 | 5 | 24 | 10 | 2 | 12 |
| South Chicago High..... | 18 | 6 | 24 | 23 | 7 | 30 | 10 | 17 | 27 | 14 | 19 | 33 | 23 | 3 | 32 |
| South Division High..... | 34 | 13 | 47 | 62 | 24 | 86 | 66 | 24 | 90 | 58 | 40 | 98 | 29 | 37 | 66 |
| Agassiz..... | ... | ... | ... | 22 | 11 | 33 | 55 | 23 | 78 | 91 | 36 | 127 | 53 | 23 | 76 |
| Bowen..... | 5 | ... | 5 | 24 | 5 | 29 | 34 | 5 | 39 | 46 | 12 | 58 | 20 | 2 | 22 |
| Burr..... | 27 | 3 | 30 | 111 | 13 | 124 | 91 | 18 | 109 | 117 | 10 | 127 | 52 | 11 | 63 |
| Cornell..... | ... | ... | ... | ... | ... | ... | 44 | 8 | 52 | 29 | 4 | 33 | 7 | ... | 7 |
| Emerson..... | 45 | 21 | 66 | 25 | 11 | 36 | 37 | 13 | 50 | 41 | 16 | 57 | 50 | 13 | 63 |
| Franklin..... | 32 | 5 | 37 | 105 | 15 | 120 | 82 | 30 | 112 | 108 | 32 | 140 | 78 | 15 | 93 |
| Froebel..... | 88 | 10 | 98 | 76 | 18 | 94 | 67 | 14 | 81 | 53 | 16 | 69 | 37 | 6 | 43 |
| Garrison..... | 103 | 36 | 139 | 111 | 46 | 157 | 149 | 58 | 207 | 196 | 69 | 265 | 166 | 58 | 224 |
| Harrison..... | 42 | 9 | 51 | 37 | 6 | 43 | 50 | 10 | 60 | 45 | 15 | 60 | 32 | 12 | 44 |
| Haven..... | 28 | 7 | 35 | 43 | 14 | 57 | 53 | 13 | 66 | 64 | 9 | 73 | 86 | 14 | 100 |
| Hendricks..... | 29 | 10 | 39 | 44 | 7 | 51 | 40 | 9 | 49 | 65 | 8 | 73 | 40 | 7 | 47 |
| Hollen..... | 27 | 1 | 28 | 79 | 18 | 97 | 73 | 9 | 82 | 115 | 16 | 131 | 91 | 13 | 104 |
| Montefiore..... | 26 | 4 | 30 | 59 | 12 | 71 | 65 | 7 | 72 | 80 | 10 | 90 | 19 | 8 | 27 |
| Newberry..... | 24 | 9 | 33 | 57 | 14 | 71 | 71 | 15 | 86 | 53 | 20 | 75 | 13 | 1 | 14 |
| Newsboys' Home..... | 25 | ... | 25 | 14 | ... | 14 | 13 | ... | 13 | 7 | ... | 7 | 20 | ... | 20 |
| O'Toole..... | 16 | 5 | 21 | 71 | 5 | 76 | 80 | 19 | 105 | 115 | 26 | 141 | 69 | 7 | 76 |
| Perkins Bass..... | 21 | 4 | 25 | 22 | 20 | 42 | 32 | 8 | 40 | 43 | 18 | 61 | 61 | 14 | 75 |
| Pullman..... | 33 | 7 | 40 | 61 | 12 | 73 | 39 | 6 | 45 | 51 | 13 | 64 | 54 | 5 | 59 |
| Raymond..... | 27 | 15 | 42 | 65 | 20 | 85 | 64 | 24 | 88 | 88 | 32 | 120 | 39 | 19 | 58 |
| Scammon..... | 21 | 7 | 28 | 87 | 9 | 96 | 84 | 9 | 93 | 109 | 24 | 133 | 94 | 10 | 104 |
| Sherwood..... | 18 | 8 | 26 | 36 | 10 | 46 | 63 | 11 | 74 | 55 | 5 | 60 | 59 | 9 | 68 |
| Thos. Chalmers..... | 20 | 6 | 26 | 40 | 10 | 50 | 44 | 9 | 53 | 31 | 11 | 42 | 30 | 4 | 34 |
| Troop..... | 123 | 62 | 185 | 76 | 21 | 97 | 48 | 16 | 64 | 75 | 31 | 105 | 60 | 18 | 78 |
| Von Humboldt..... | 34 | 8 | 42 | 70 | 19 | 89 | 62 | 24 | 86 | 86 | 36 | 122 | 69 | 21 | 90 |
| Waf's Mission..... | 38 | ... | 38 | 16 | ... | 16 | 6 | ... | 6 | 21 | ... | 21 | 40 | ... | 40 |
| Wells..... | 44 | 13 | 57 | 169 | 34 | 203 | 134 | 14 | 148 | 140 | 23 | 163 | 110 | 30 | 130 |
| Totals..... | 1,107 | 333 | 1,440 | 1,882 | 465 | 2,347 | 1,836 | 490 | 2,326 | 2,245 | 629 | 2,874 | 1,650 | 382 | 2,032 |

NATIVITY OF PUPILS ATTENDING EVENING SCHOOLS.

| SCHOOLS. | AMERICAN. | | | GERMAN. | | | SCANDINAVIAN. | | | BOHEMIAN. | | | ALL OTHER NATIONALITIES. | | |
|---------------------------------------|-----------|---------|--------|---------|---------|--------|---------------|---------|--------|-----------|---------|--------|--------------------------|---------|--------|
| | Male. | Female. | Total. | Male. | Female. | Total. | Male. | Female. | Total. | Male. | Female. | Total. | Male. | Female. | Total. |
| Englewood High..... | 144 | 72 | 216 | 10 | 11 | 21 | 10 | 16 | 26 | 13 | 13 | 26 | 26 | 3 | 29 |
| English High and Manual Training..... | 114 | 54 | 168 | 19 | 5 | 24 | 16 | 1 | 17 | 13 | 13 | 27 | 27 | 5 | 32 |
| North Division High..... | 163 | 53 | 216 | 21 | 4 | 25 | 28 | 10 | 28 | 1 | 1 | 29 | 13 | 5 | 17 |
| Northwest Division High..... | 208 | 86 | 294 | 28 | 7 | 35 | 36 | 10 | 46 | 1 | 1 | 27 | 27 | 5 | 32 |
| Pullman High..... | 54 | 28 | 82 | 3 | ..... | 3 | 20 | 9 | 29 | 1 | 1 | 26 | 26 | 5 | 31 |
| South Chicago High..... | 96 | 46 | 142 | 8 | ..... | 8 | 15 | 1 | 2 | 1 | 1 | 13 | 13 | 5 | 18 |
| South Division High..... | 180 | 103 | 283 | 92 | 34 | 126 | 15 | 21 | 36 | 2 | 2 | 38 | 24 | 3 | 27 |
| Agassiz..... | 119 | 37 | 156 | 67 | 34 | 101 | 26 | 9 | 35 | 1 | 1 | 26 | 26 | 1 | 27 |
| Bowen..... | 83 | 12 | 95 | 14 | 5 | 19 | 18 | 5 | 23 | 1 | 1 | 19 | 13 | 2 | 15 |
| Burr..... | 93 | 18 | 111 | 100 | 16 | 116 | 1 | 1 | 2 | 11 | 11 | 11 | 193 | 20 | 213 |
| Cornell..... | 42 | 9 | 51 | 20 | 1 | 21 | 10 | 2 | 12 | 8 | 8 | 18 | 15 | 4 | 19 |
| Emerson..... | 168 | 59 | 227 | 5 | 3 | 8 | 10 | 8 | 18 | 3 | 3 | 15 | 21 | 4 | 25 |
| Franklin..... | 168 | 32 | 200 | 61 | 33 | 94 | 152 | 28 | 180 | 3 | 3 | 41 | 89 | 32 | 121 |
| Fröbel..... | 82 | 11 | 93 | 58 | 10 | 68 | 57 | 5 | 62 | 35 | 6 | 41 | 529 | 217 | 746 |
| Garfield..... | 107 | 31 | 138 | 75 | 18 | 93 | 1 | ..... | 1 | 13 | 1 | 5 | 46 | 13 | 59 |
| Harrison..... | 127 | 27 | 154 | 13 | 5 | 18 | 15 | 7 | 22 | 5 | 1 | 1 | 55 | 7 | 62 |
| Haven..... | 204 | 40 | 244 | 11 | 5 | 16 | 4 | 4 | 8 | 1 | 1 | 1 | 42 | 1 | 43 |
| Hendricks..... | 144 | 30 | 174 | 34 | 9 | 39 | 1 | 1 | 2 | 1 | 1 | 1 | 188 | 10 | 198 |
| Holden..... | 127 | 32 | 159 | 79 | 12 | 91 | 2 | 2 | 2 | 4 | 4 | 102 | 18 | 18 | 120 |
| Monteriore..... | 19 | 3 | 22 | 22 | 5 | 27 | 106 | 15 | 121 | 1 | 1 | 16 | 16 | 4 | 20 |
| Newberry..... | 91 | 17 | 108 | 84 | 35 | 119 | 3 | 3 | 4 | 1 | 1 | 1 | 102 | 29 | 131 |
| New-boys' Home..... | 77 | 2 | 79 | 2 | ..... | 2 | 2 | ..... | 3 | 20 | 8 | 27 | 102 | 29 | 131 |
| O'Toole..... | 207 | 30 | 237 | 17 | 4 | 21 | 2 | 1 | 3 | 5 | 5 | 7 | 18 | 6 | 24 |
| Perkins Bass..... | 117 | 49 | 166 | 26 | 7 | 33 | 13 | 2 | 15 | 1 | 1 | 14 | 76 | 8 | 84 |
| Pullman..... | 99 | 21 | 120 | 58 | 10 | 68 | 25 | 4 | 39 | 2 | 2 | 32 | 32 | 12 | 44 |
| Raymond..... | 183 | 74 | 257 | 35 | 13 | 48 | 25 | 11 | 36 | ..... | ..... | 175 | 175 | 11 | 186 |
| Seammon..... | 188 | 36 | 224 | 24 | 8 | 32 | 12 | 4 | 18 | ..... | ..... | 6 | 6 | 2 | 8 |
| Sherwood..... | 133 | 16 | 149 | 12 | 4 | 16 | 72 | 21 | 93 | ..... | ..... | 1 | 4 | 1 | 5 |
| Thomas Chalmers..... | 115 | 32 | 147 | 26 | 5 | 31 | 11 | 1 | 12 | 9 | 1 | 10 | 23 | 3 | 26 |
| Throop..... | 75 | 30 | 105 | 41 | 20 | 61 | 96 | 54 | 150 | 243 | 95 | 338 | 27 | 2 | 29 |
| Von Humboldt..... | 135 | 31 | 166 | 62 | 21 | 83 | 3 | 3 | 3 | 1 | 1 | 4 | 29 | 2 | 31 |
| Walt's Mission..... | 89 | ..... | 89 | 16 | ..... | 16 | 15 | 2 | 17 | 4 | 4 | 25 | 252 | 47 | 299 |
| Wells..... | 164 | 22 | 186 | 120 | 25 | 145 | 15 | 2 | 17 | 17 | 8 | 25 | 252 | 47 | 299 |
| Totals..... | 4,115 | 1,131 | 5,246 | 1,145 | 342 | 1,487 | 816 | 221 | 1,037 | 409 | 121 | 530 | 2,288 | 484 | 2,712 |

AGE OF PUPILS ATTENDING EVENING SCHOOLS.

| SCHOOLS. | UNDER 15 YEARS. | | | BETWEEN 15 AND 18 YEARS. | | | BETWEEN 18 AND 21 YEARS. | | | BETWEEN 21 AND 25 YEARS. | | | BETWEEN 25 AND 30 YEARS. | | | OVER 30 YEARS. | | |
|----------------------------|-----------------|---------|--------|--------------------------|---------|--------|--------------------------|---------|--------|--------------------------|---------|--------|--------------------------|---------|--------|----------------|---------|--------|
| | Male. | Female. | Total. | Male. | Female. | Total. | Male. | Female. | Total. | Male. | Female. | Total. | Male. | Female. | Total. | Male. | Female. | Total. |
| Englewood High..... | 10 | 4 | 10 | 67 | 27 | 94 | 61 | 28 | 89 | 20 | 14 | 34 | 14 | 11 | 25 | 18 | 6 | 24 |
| English High and Man. Tr.. | 20 | 5 | 24 | 88 | 28 | 116 | 46 | 13 | 59 | 15 | 15 | 30 | 18 | 5 | 23 | 17 | 9 | 26 |
| North Division High..... | 12 | 9 | 21 | 84 | 26 | 110 | 70 | 13 | 83 | 26 | 9 | 35 | 18 | 8 | 26 | 17 | 2 | 19 |
| Northwest Division High.. | 7 | 3 | 10 | 108 | 49 | 157 | 103 | 41 | 144 | 41 | 7 | 48 | 26 | 2 | 28 | 10 | 2 | 12 |
| Pullman High..... | 18 | 7 | 25 | 50 | 23 | 73 | 29 | 13 | 42 | 6 | 4 | 10 | 8 | 2 | 8 | 3 | 3 | 3 |
| South Chicago High..... | 8 | 3 | 11 | 75 | 25 | 100 | 34 | 14 | 48 | 15 | 8 | 23 | 21 | 11 | 32 | 17 | 14 | 31 |
| South Division High..... | 47 | 13 | 60 | 89 | 31 | 120 | 80 | 28 | 108 | 44 | 15 | 59 | 22 | 4 | 62 | 10 | 8 | 18 |
| Agassiz..... | 35 | 8 | 43 | 40 | 7 | 47 | 35 | 6 | 41 | 26 | 16 | 42 | 14 | 4 | 48 | 10 | 4 | 14 |
| Bowen..... | 95 | 22 | 117 | 159 | 20 | 179 | 21 | 6 | 27 | 19 | 3 | 22 | 10 | 1 | 23 | 4 | 2 | 6 |
| Burr..... | 5 | 2 | 7 | 44 | 9 | 53 | 58 | 9 | 67 | 34 | 1 | 35 | 33 | 1 | 34 | 19 | 2 | 21 |
| Cornell..... | 50 | 24 | 74 | 88 | 22 | 110 | 36 | 17 | 53 | 6 | 6 | 12 | 2 | 5 | 17 | 8 | 7 | 25 |
| Emerson..... | 46 | 24 | 70 | 126 | 21 | 147 | 73 | 17 | 90 | 79 | 14 | 93 | 46 | 14 | 60 | 36 | 8 | 44 |
| Franklin..... | 57 | 16 | 73 | 68 | 34 | 102 | 87 | 5 | 92 | 62 | 4 | 66 | 35 | 2 | 68 | 12 | 3 | 15 |
| Froebel..... | 166 | 91 | 257 | 189 | 117 | 306 | 184 | 42 | 226 | 151 | 13 | 164 | 83 | 4 | 167 | 42 | 1 | 168 |
| Garfield..... | 40 | 16 | 56 | 58 | 16 | 74 | 28 | 9 | 37 | 35 | 7 | 42 | 26 | 4 | 50 | 36 | 16 | 52 |
| Harrison..... | 29 | 15 | 44 | 67 | 14 | 81 | 75 | 8 | 83 | 44 | 4 | 48 | 23 | 8 | 51 | 6 | 4 | 59 |
| Haven..... | 86 | 16 | 102 | 79 | 15 | 94 | 24 | 1 | 25 | 13 | 3 | 16 | 10 | 3 | 19 | 11 | 1 | 20 |
| Hendricks..... | 102 | 33 | 135 | 93 | 18 | 111 | 65 | 3 | 68 | 69 | 4 | 73 | 45 | 2 | 75 | 31 | 2 | 77 |
| Holten..... | 18 | 8 | 26 | 61 | 16 | 77 | 51 | 9 | 60 | 50 | 4 | 54 | 38 | 2 | 56 | 40 | 1 | 41 |
| Monteriore..... | 51 | 20 | 71 | 66 | 14 | 80 | 25 | 5 | 30 | 21 | 8 | 29 | 15 | 7 | 36 | 15 | 5 | 21 |
| Newberry..... | 43 | 22 | 65 | 22 | 14 | 36 | 14 | 2 | 16 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 1 | 2 |
| News-boys' Home..... | 103 | 31 | 134 | 102 | 23 | 125 | 50 | 2 | 52 | 33 | 2 | 35 | 42 | 3 | 45 | 27 | 1 | 28 |
| O'Toole..... | 21 | 15 | 36 | 63 | 28 | 91 | 37 | 9 | 46 | 30 | 2 | 38 | 20 | 4 | 42 | 21 | 8 | 29 |
| Perkins Bass..... | 33 | 16 | 49 | 103 | 23 | 126 | 56 | 1 | 57 | 23 | 1 | 24 | 15 | 1 | 25 | 8 | 1 | 9 |
| Pullman..... | 32 | 6 | 38 | 107 | 41 | 148 | 63 | 3 | 66 | 35 | 8 | 43 | 22 | 8 | 30 | 18 | 25 | 43 |
| Raymond..... | 60 | 11 | 71 | 146 | 16 | 162 | 97 | 14 | 111 | 60 | 7 | 67 | 24 | 7 | 71 | 14 | 4 | 75 |
| Sherwood..... | 61 | 18 | 79 | 52 | 8 | 60 | 46 | 12 | 58 | 38 | 9 | 47 | 19 | 4 | 53 | 7 | 2 | 21 |
| Thomas Chalmers..... | 16 | 7 | 23 | 85 | 20 | 105 | 38 | 11 | 49 | 10 | 1 | 11 | 4 | 1 | 5 | 12 | 1 | 13 |
| Thorp..... | 63 | 55 | 118 | 117 | 58 | 175 | 71 | 14 | 85 | 54 | 8 | 62 | 46 | 8 | 54 | 31 | 5 | 36 |
| Von Humboldt..... | 64 | 25 | 89 | 95 | 22 | 117 | 55 | 20 | 75 | 43 | 15 | 58 | 33 | 13 | 71 | 31 | 13 | 44 |
| Waifs' Mission..... | 103 | 68 | 171 | 39 | 39 | 78 | 12 | 2 | 14 | 2 | 2 | 4 | 2 | 2 | 4 | 67 | 1 | 68 |
| Wells..... | 108 | 32 | 140 | 186 | 40 | 226 | 96 | 26 | 122 | 80 | 5 | 85 | 66 | 1 | 86 | 67 | 1 | 68 |
| Totals..... | 1,579 | 536 | 2,115 | 2,859 | 850 | 3,709 | 1,836 | 423 | 2,259 | 1,188 | 212 | 1,400 | 790 | 140 | 930 | 561 | 188 | 699 |

AMOUNT EXPENDED FOR MAINTENANCE OF EVENING SCHOOLS.

| FOR TEACHERS. | FOR JANITORS. | FOR FUEL, LIGHT AND INCIDENTALS. | TOTAL EXPENDITURES. | COST PER PUPIL. | |
|---------------|---------------|-------------------------------------|------------------------|-------------------------|---------------------------|
| | | | | On Total Enrollment. | On Average Attendance. |
| \$55,394 75 | \$ 5,308 75 | \$ 6,698 08 | \$67,399 58 | \$6.12 | \$12.64 |

HIGH SCHOOLS.

ENROLLMENT, ETC., DURING THE SCHOOL YEAR 1896-7.

| HIGH SCHOOLS. | ENROLLMENT | | | | | | | | | | AGE AT DATE OF FIRST ENROLLMENT DURING THE YEAR. | | | | | | | | | | | |
|----------------------------------|--------------|----------|--------------|--------|-----------------|--------|----------------|----------|--------|-------|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|----------------|--------|-----|-------|-------|
| | Ninth Grade. | | Tenth Grade. | | Eleventh Grade. | | Twelfth Grade. | | Total. | | Under 13 Years. | Between 13 and 14 Years. | Between 14 and 15 Years. | Between 15 and 16 Years. | Between 16 and 17 Years. | Between 17 and 18 Years. | Between 18 and 19 Years. | Over 19 Years. | Total. | | | |
| | Males. | Females. | Total. | Males. | Females. | Total. | Males. | Females. | Total. | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | |
| Calumet..... | 41 | 59 | 100 | 65 | 40 | 201 | 8 | 2 | 234 | 78 | 156 | 234 | 2 | 5 | 36 | 52 | 53 | 40 | 22 | 24 | 234 | 234 |
| Englewood..... | 112 | 234 | 346 | 281 | 146 | 270 | 26 | 19 | 906 | 258 | 648 | 906 | 4 | 39 | 108 | 192 | 194 | 194 | 89 | 86 | 906 | 906 |
| English High and Manual Training | 137 | 339 | 541 | 370 | 258 | 370 | 50 | 129 | 439 | 439 | ..... | 439 | 1 | 24 | 75 | 102 | 88 | 85 | 40 | 24 | 439 | 439 |
| Hyde Park..... | 202 | 339 | 541 | 370 | 258 | 370 | 192 | 179 | 1,360 | 921 | 231 | 1,360 | 12 | 57 | 206 | 285 | 310 | 273 | 144 | 73 | 1,360 | 1,360 |
| Jefferson..... | 34 | 58 | 92 | 48 | 15 | 56 | 6 | 24 | 226 | 72 | 154 | 226 | 7 | 15 | 45 | 45 | 45 | 43 | 17 | 15 | 226 | 226 |
| Lake View..... | 43 | 129 | 172 | 93 | 64 | 79 | 11 | 21 | 376 | 87 | 289 | 376 | 7 | 25 | 76 | 104 | 74 | 55 | 27 | 8 | 376 | 376 |
| Lake View..... | 129 | 326 | 455 | 209 | 147 | 209 | 24 | 70 | 887 | 260 | 627 | 887 | 9 | 48 | 131 | 222 | 227 | 128 | 77 | 45 | 887 | 887 |
| Marshall..... | 39 | 120 | 159 | 107 | 56 | 69 | ..... | ..... | 335 | 70 | 265 | 335 | 5 | 14 | 50 | 89 | 80 | 55 | 30 | 12 | 335 | 335 |
| Medill..... | 49 | 86 | 135 | 89 | 13 | 68 | ..... | ..... | 311 | 93 | 218 | 311 | 4 | 29 | 63 | 74 | 87 | 32 | 19 | 3 | 311 | 311 |
| North Division..... | 71 | 162 | 233 | 179 | 108 | 133 | 26 | 56 | 627 | 164 | 463 | 627 | 3 | 27 | 90 | 141 | 149 | 135 | 56 | 26 | 627 | 627 |
| Northwest Division | 142 | 278 | 420 | 184 | 162 | 111 | ..... | ..... | 789 | 202 | 587 | 789 | 1 | 60 | 157 | 207 | 151 | 122 | 51 | 40 | 789 | 789 |
| South Chicago..... | 54 | 72 | 126 | 74 | 34 | 34 | 14 | 49 | 277 | 84 | 193 | 277 | 4 | 17 | 57 | 59 | 68 | 41 | 19 | 12 | 277 | 277 |
| South Division..... | 110 | 214 | 354 | 239 | 170 | 170 | 17 | 76 | 856 | 235 | 621 | 856 | 8 | 53 | 129 | 179 | 196 | 161 | 88 | 42 | 856 | 856 |
| West Division..... | 101 | 323 | 424 | 322 | 205 | 205 | 46 | 218 | 1,215 | 242 | 973 | 1,215 | 7 | 56 | 160 | 246 | 249 | 230 | 179 | 88 | 1,215 | 1,215 |
| Totals..... | 1,264 | 2,430 | 3,694 | 2,380 | 1,721 | 1,711 | 238 | 815 | 8,838 | 2,723 | 6,115 | 8,838 | 67 | 469 | 1,383 | 1,997 | 1,972 | 1,594 | 858 | 498 | 8,838 | 8,838 |

* Post Graduates.

HIGH SCHOOLS. ATTENDANCE, PROMOTIONS, ETC., DURING THE SCHOOL YEAR 1896-7.

| HIGH SCHOOLS. | AVERAGE DAILY MEMBERSHIP | | | | | AVERAGE DAILY ATTENDANCE. | | | | | PER CENT. OF ATTENDANCE. | | | | | PROMOTIONS BY GRADES. | | | | |
|---------------------------------------|--------------------------|--------------|-----------------|----------------|--------|---------------------------|--------------|-----------------|----------------|--------|--------------------------|--------------|-----------------|----------------|--------|-----------------------|--------------------|----------------------|------------|--------|
| | Ninth Grade. | Tenth Grade. | Eleventh Grade. | Twelfth Grade. | Total. | Ninth Grade. | Tenth Grade. | Eleventh Grade. | Twelfth Grade. | Total. | Ninth Grade. | Tenth Grade. | Eleventh Grade. | Twelfth Grade. | Total. | Ninth to Tenth. | Tenth to Eleventh. | Eleventh to Twelfth. | Graduates. | Total. |
| Calumet..... | 85.2 | 61.6 | 32.8 | *1.6 | 206.3 | 82.3 | 58.4 | 30.2 | *1.6 | 196.3 | 96.6 | 94.8 | 92.0 | *100.0 | 95.1 | 70 | 50 | 25 | 24 | 169 |
| Englewood..... | 315.1 | 243.7 | 131.8 | 122.1 | 812.7 | 303.3 | 231.8 | 127.8 | 117.1 | 780.0 | 96.2 | 95.1 | 96.9 | 95.9 | 96.0 | 233 | 168 | 111 | 115 | 627 |
| English High and Manual Training..... | 183.0 | 119.7 | 94.9 | ..... | 397.6 | 176.6 | 113.8 | 90.9 | ..... | 381.3 | 96.5 | 95.0 | 95.8 | ..... | 95.9 | 139 | 101 | ..... | 80 | 320 |
| Hyde Park..... | 466.3 | 321.4 | 239.8 | 165.3 | 1192.8 | 435.2 | 298.7 | 245.9 | 155.9 | 1115.7 | 93.3 | 92.9 | 94.2 | 94.3 | 93.5 | 350 | 265 | 211 | 152 | 978 |
| Jefferson..... | 84.6 | 41.7 | 50.4 | 28.4 | 205.1 | 83.2 | 40.8 | 49.0 | 28.0 | 201.0 | 98.3 | 97.8 | 97.2 | 98.5 | 98.0 | 86 | 36 | 45 | 30 | 197 |
| Lake..... | 150.6 | 82.2 | 67.5 | 29.6 | 329.9 | 147.0 | 80.0 | 66.0 | 29.1 | 322.1 | 97.6 | 97.3 | 97.7 | 98.3 | 97.6 | 117 | 63 | 52 | 31 | 263 |
| Lake View..... | 393.0 | 195.9 | 120.3 | 90.3 | 799.5 | 378.0 | 188.6 | 116.1 | 87.6 | 770.3 | 96.2 | 96.3 | 96.5 | 97.0 | 96.3 | 294 | 167 | 108 | 84 | 653 |
| Marshall..... | 132.8 | 98.1 | 49.0 | ..... | 279.9 | 126.1 | 91.7 | 45.8 | ..... | 263.6 | 95.0 | 93.4 | 93.4 | ..... | 94.2 | 109 | 71 | 55 | ..... | 235 |
| Medill..... | 118.2 | 94.6 | 62.4 | ..... | 275.2 | 114.3 | 90.4 | 60.4 | ..... | 265.1 | 96.7 | 95.6 | 98.4 | ..... | 96.3 | 98 | 69 | 53 | ..... | 220 |
| North Division..... | 204.1 | 158.7 | 125.2 | 80.3 | 568.3 | 193.3 | 149.4 | 120.0 | 76.5 | 539.2 | 94.7 | 94.1 | 95.9 | 95.2 | 94.8 | 140 | 122 | 108 | 82 | 452 |
| North-West Division..... | 359.9 | 169.8 | 103.4 | *4.4 | 639.0 | 314.3 | 156.0 | 97.9 | *3.8 | 655.2 | 95.6 | 95.2 | 94.7 | *86.3 | 95.1 | 222 | 117 | 93 | 55 | 492 |
| South Chicago..... | 103.7 | 67.8 | 32.6 | 17.5 | 245.6 | 100.3 | 65.2 | 31.6 | 10.0 | 237.1 | 96.7 | 96.2 | 97.0 | 96.4 | 96.5 | 78 | 51 | 34 | 39 | 202 |
| South Division..... | 303.8 | 202.9 | 154.9 | 89.9 | 751.5 | 289.8 | 192.0 | 149.2 | 86.6 | 717.6 | 95.3 | 94.6 | 96.3 | 96.3 | 95.5 | 179 | 117 | 115 | 90 | 501 |
| West Division..... | 365.5 | 289.2 | 188.0 | 251.0 | 1093.7 | 352.7 | 278.3 | 181.5 | 240.0 | 1052.5 | 96.8 | 96.2 | 96.5 | 95.6 | 96.2 | 275 | 232 | 153 | 232 | 892 |
| Totals..... | 3265.8 | 2141.3 | 1453.0 | 987.0 | 7847.1 | 3126.4 | 2035.1 | 1392.3 | 943.2 | 7497.0 | 95.7 | 95.0 | 95.8 | 95.5 | 95.5 | 2390 | 1629 | 1163 | *5 1014 | 6201 |

* Post Graduates.

HIGH SCHOOLS.

EXPENDITURES ON ACCOUNT OF HIGH SCHOOLS DURING
THE SCHOOL YEAR 1896-7.

| | |
|---|----------------------|
| Amount paid for salaries of Teachers..... | \$ 351,235 95 |
| Amount paid for salaries of Engineers and Janitors..... | 22,595 49 |
| Amount paid for fuel, supplies, repairs, etc..... | 22,698 61 |
| Total cost for High Schools..... | <u>\$ 396,530 05</u> |
| Average daily membership..... | 7,450 |
| Cost per pupil..... | \$ 53 23 |

ENGLISH HIGH AND MANUAL TRAINING
SCHOOL.

| | |
|--|---------------------|
| Amount paid for salaries of Teachers..... | \$ 27,749 00 |
| Amount paid for salaries of Engineers and Janitors..... | 1,734 50 |
| Amount paid for fuel, supplies, repairs, etc..... | 11,337 61 |
| Total cost for English High and Manual Training School.. | <u>\$ 40,821 11</u> |
| Average daily membership..... | 398 |
| Cost per pupil..... | \$ 102 56 |

OFFICERS OF BOARD—1897-8.

EDWARD G. HALLE, *President.*

THOMAS CUSACK, *Vice-President.*

WM. A. S. GRAHAM, *Secretary.*

MEMBERSHIP.

| | | | | | | |
|---------------------------|---|---|---|---|---|------------------------------------|
| THOMAS BREMAN, | - | - | - | - | - | 16 Reaper Block |
| DANIEL R. CAMERON, | - | - | - | - | - | 73 Lake Street |
| THOMAS CUSACK, | - | - | - | - | - | 500 Throop Street |
| ALFRED S. TRUDE, | - | - | - | - | - | Room 15, 79 Clark Street |
| MRS. ELLA G. HULL, | - | - | - | - | - | 3221 South Park Avenue |
| MRS. EVELYN A. FRAKE, | - | - | - | - | - | 625 Fulton Street |
| P. F. PETTIBONE, | - | - | - | - | - | 48 Jackson Street |
| OTTO C. SCHNEIDER, | - | - | - | - | - | 392 North Clark Street |
| JOSEPH H. STRONG, | - | - | - | - | - | Room 26, 115 Monroe Street |
| WILLIAM R. HARPER, | - | - | - | - | - | 48th Street and Ellis Avenue |
| GEORGE E. ADAMS, | - | - | - | - | - | Room 914, Temple Building |
| CLAYTON MARK, | - | - | - | - | - | 26th Street and Blue Island Avenue |
| HOWARD H. GROSS, | - | - | - | - | - | Room 1220, Chamber of Commerce |
| MRS. CAROLINE K. SHERMAN, | - | - | - | - | - | 225 South Leavitt Street |
| JOHN T. KEATING, | - | - | - | - | - | 51 Lake Street |
| THOMAS GALLAGHER, | - | - | - | - | - | 258 South Halsted Street |
| BERNARD F. ROGERS, | - | - | - | - | - | "O," The Rookery |
| JESSE SHERWOOD, | - | - | - | - | - | 47 Exchange Building, Stock Yards |
| GRAHAME H. HARRIS, | - | - | - | - | - | Room 812, 59 Clark Street |
| OTTO GRESHAM, | - | - | - | - | - | Room 701, 131 La Salle Street |
| EDWARD G. HALLE, | - | - | - | - | - | 204 Royal Insurance Building |

HEADS OF DEPARTMENTS.

| | | | | | | |
|--------------------|---|---|---|---|---|-------------------------------|
| ALBERT G. LANE, | - | - | - | - | - | <i>Superintendent</i> |
| DONALD L. MORRILL, | - | - | - | - | - | <i>Attorney</i> |
| JOHN A. GUILFORD, | - | - | - | - | - | <i>Business Manager</i> |
| NORMAND S. PATTON, | - | - | - | - | - | <i>Architect</i> |
| THOMAS J. WATERS, | - | - | - | - | - | <i>Chief Engineer</i> |
| GEORGE W. CUSTER, | - | - | - | - | - | <i>Auditor</i> |
| WM. A. S. GRAHAM, | - | - | - | - | - | <i>Clerk and School Agent</i> |

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NOTE—Courses of study will be mailed on request. Names of High School graduates are printed in the Proceedings of the Board.

Section IX.

CITY OF CHICAGO.

SECOND ANNUAL REPORT

OF THE

CIVIL SERVICE COMMISSION

TO

HIS HONOR, THE MAYOR,

FOR THE

Year Ending December 31, 1896.



CHICAGO, ILL., JANUARY 14, 1897.

Printed for the Commission.

ORGANIZATION OF THE COMMISSION.

CIVIL SERVICE COMMISSION

OF THE

CITY OF CHICAGO.

| | | |
|-----------------------------------|----------------------------|------------------------|
| JOHN M. CLARK, <i>President</i> , | - - - | 2000 Prairie Avenue. |
| | Term expires July 1, 1898. | |
| ROBERT A. WALLER, - | - - - | 1665 Sheridan Road. |
| | Term expires July 1, 1897. | |
| CHRISTOPH HOTZ, - | - - - | 301 West Adams Street. |
| | Term expires July 1, 1899. | |

EDWARD J. PHELPS,
Secretary and Chief Examiner,
5115 Cornell Avenue.

MEDICAL BOARD.

| | | |
|-----------------------------|-------|-----------------------|
| WILLIAM CUTHBERTSON, M. D., | - - - | 189 41st Street. |
| JOSEPH R. HAWLEY, M. D., | - - - | 3515 Grand Boulevard. |
| ARTHUR R. EDWARDS, M. D., | - - - | 2818 Indiana Avenue. |
| MAURICE L. GOODKIND, M. D., | - - - | 2948 Indiana Avenue. |
| SAMUEL C. PLUMMER, M. D., | - - - | 4304 Lake Avenue. |

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CITY OF CHICAGO.

REPORT OF THE CIVIL SERVICE COMMISSION TO HIS HONOR, THE MAYOR,
FOR THE YEAR ENDING DECEMBER 31, 1896.

OFFICE OF THE CIVIL SERVICE COMMISSION.

CHICAGO, January 14, 1897.

HON. GEORGE B. SWIFT, Mayor of Chicago.

Sir:—Section 15 of an act entitled “An Act to Regulate the Civil Service of Cities,” approved March 20th, 1895, provides that each of the Civil Service Commissions appointed under the terms of the Act, shall, on or before the 15th day of January of each year, make to the Mayor, for transmission to the City Council, a report showing as follows:

- I. Its own action.
- II. The rules in force.
- III. The practical effects thereof.
- IV. Any suggestions it may approve for the more effectual accomplishment of the purposes of the Act.

In accordance with the provisions of the above section, the Civil Service Commission of Chicago has the honor to submit herewith its report for the fiscal year ending December 31st, 1896, arranged in the order above given.

I. ACTION OF THE COMMISSION.

Regular meetings of the Commission have been held daily in its office, Room 115, City Hall. At many of these meetings only matters of routine connected with its work have been considered. At all meetings where executive business was transacted, a careful record has been kept, and as the best means of showing its official action, the Commission respectfully submits herewith the minutes in full of all such meetings held by it during the year. It also has the honor of submitting reports of the Secretary and Chief Examiner, and of the Board of Medical Examiners; an itemized

account of all expenditures made by it; and statistical tables showing in detail facts relating to examinations, appointments, promotions and removals, in the Classified Service.

During the year a total of 24,500 persons have taken out applications for entrance to the various branches of the Classified Service, of whom 7,148 have returned their applications properly filled out and they have been entered upon the books of the Commission.

Of this number 4,411 have been examined and 2,429 have passed with the required average, and have been placed upon eligible lists, awaiting appointment to the service as vacancies may occur. The total expenditures of the Commission during the year were \$30,-930.69.

During the year 1,396 persons have been certified for appointment and have entered the service on probation.

Especial attention is called to the reports of the Secretary and Chief Examiner and of the Medical Board, which give full details as to the methods followed in conducting examinations, and as to the results obtained.

The work of the Commission has been much hampered by reason of the insufficient quarters assigned for its occupation in the City Hall, and by the limited appropriation made for its use by the City Council; but the necessities of the city were such that, at the time, this seemed unavoidable.

With the completion of the new Public Library building, and the removal of that department from the City Hall, much needed relief in the matter of accommodations is promised.

By virtue of the provisions of Section 14 of the Act, the Commission has at different times during the year, as its records show, held investigations as to the "enforcement of the Act and of its rules" and "the conduct and action of appointees in the Classified Service."

The power vested in the Commission for this purpose is specific and ample, and may be so used as to be of incalculable benefit to the public service; but it is the opinion of the Commission, based upon experience, that this power should not be used lightly nor for trifling cause.

The cases investigated by the Commission were believed to be of sufficient gravity to warrant the exercise of the power conferred by the law and in the opinion of the Commission the results fully justified that belief.

The funds at the disposal of the Commission not being adequate

for the purpose, assistance volunteered by the Civic Federation and by the Citizens' Association of Chicago, was gladly accepted and is here gratefully acknowledged.

II. THE RULES OF THE COMMISSION.

The rules of the Commission will be found printed in full herewith. By comparison with those in force at the time of the last report from the Commission, it will be seen that a few minor changes, based upon wider experience, have been made. Until further changed in the manner provided for in the Act, the rules as printed herewith will stand as the official rules of the Commission.

Inasmuch as Section 34 of the Act fixes the same penalty for violation of any rule promulgated in accordance with its provisions that attaches to a violation of the Act itself, the utmost care has been taken in framing these rules. It is believed that they conform strictly to the letter and spirit of the law; that they are plainly stated and can be easily understood by all to whom they apply; and that they are as elastic as a due enforcement of the law will permit. The fact that they have been substantially adopted by other cities of this and other states, is evidence of the favor in which they are held.

III. PRACTICAL EFFECT OF THE LAW AND THE RULES.

The most marked effect that the adoption of the Civil Service Law and rules has thus far produced, has been in relieving the Mayor and heads of departments from the pressure of applicants for office, thus leaving them free to attend to their more important public duties.

Perhaps its next most marked effect has been in relieving the city employes from the unfair burden of political assessments. This had grown to be so great an evil that action by the Legislature of the State was necessary for its suppression. It was an irregular, unofficial form of taxation, levied by irresponsible agents who made no public report as to the amount collected or the purposes for which it was expended and yet its collection was officially enforced by the executive of whichever political party happened to be in power.

In discussing the practical effects produced by the operation of the law, reference to the system or methods in force prior to its adoption seems proper and to some extent necessary. The system of making promotions and appointments in the public service, based, as the law contemplates, solely upon the merit of the applicant

as ascertained by competitive examination without regard to his political, religious or social influence, is an entire change from the plan heretofore in force in Chicago, and in fact in nearly all American cities.

Under the old system the chief consideration in making an appointment was to confer a benefit upon the person appointed; under the merit system the only thing to be considered is the benefit which will accrue to the public service. That the old system has been unsatisfactory in its results, the condition of the public service in nearly all American cities bears ample testimony. That the new system will produce better results seems manifest from the effects already apparent in every place where it has been given a fair trial.

Under our form of government the citizen looks to the legislature of his state or to that of the nation for legislation touching his political rights and duties. The municipal corporation under which he lives deals chiefly with subjects touching the material or property interests of its tax payers. It is in fact essentially a business corporation, and approved business methods should be followed in its administration. We frequently hear of the wreck of some great bank, railway, insurance or other business corporation, through incompetent or corrupt management: a similar result would naturally be expected to follow similar cause in a municipal corporation, and it does so; but the failure does not manifest itself in the same way, for the reason that a municipal corporation, from its very nature, must continue its existence. The effects of incompetent administration show themselves in failure to properly perform the duties for which the corporation has its existence; that is, in failure to efficiently protect the life and property of the citizen, to provide adequate sanitary arrangements, good sewerage, clean streets, pure water, good schools, etc., etc., or, in brief, in its failure to return to the citizen full value for the money collected from him through taxation.

If this condition exists in any city, it is fair to assume that it is due to some inherent defect in the system under which the affairs of that city are administered; and there is no more probable cause than the unbusinesslike method so prevalent in American cities of making appointments to the public service on the basis of personal or political favor, and of permitting removals therefrom for purely political reasons.

The evil effects of a system of appointments based upon favoritism are not limited to the possible incompetency of the persons

thus appointed, for, as a matter of fact, good appointments have very often been made under that system. The giving and accepting of a public office or position as a personal favor seems inconsistent with our theory of government and wrong in principle; it establishes a wrong relation between the two parties to the transaction, the relation of patron and protege. This is directly implied in the term "patronage." The patron often felt it to be his duty to protect his appointees and to advance their interests, even though it had to be done at the expense of the public, and hence it is not surprising that the appointee soon came to feel that his loyalty was due to his patron more than to the city that paid him for his services, and that his principal duty was to work for the political future of his patron. However it may seem at the time, it is undoubtedly true in the long run that official patronage is a source of weakness rather than of strength; and this is equally true as applied to an individual politician or to a political party.

The growth of Chicago has been so rapid and its prosperity so great that defects in its system of administration have been less apparent than would otherwise have been the case, but that its future prosperity will be seriously menaced by a continuance of these defects, there is no reasonable doubt. Economical and able management is just as necessary to success in the affairs of a great city as in those of a great railroad or a great bank. If Chicago is to maintain its lead among American cities, it can only hope to do so by making its administration equal to that of any of its competitors.

The annual tax levy is the first lien upon all property within the municipality. If the tax be justly levied and wisely expended, it may serve to enhance the value of property. If through incompetency or corruption the proceeds be wasted or unwisely expended, the value of property will suffer thereby; and it is quite possible that the depreciation in the value of property may be greater than the total amount of the tax levied.

Under the system of making appointments to the public service in force prior to the adoption of the Civil Service Law, personal application, backed by endorsement of political friends, was made by the candidate to the Mayor, to the heads of principal departments, to the chiefs of bureaus and to the Aldermen. When the Civil Service Commission entered upon its duties, it was currently reported that upwards of 40,000 such applications were on file in the office of the Mayor and the principal departments of the city government.

It is no exaggeration to say that at least one half of the time given to public duties by the officers above named, was consumed in listening to and considering these applications. The cost to the municipality of this diversion of the time of its chief officers can only be estimated. A citizen appearing before the Mayor or head of a department on a matter of public business often had to wait hours, or perhaps days before his case could receive attention; thus not only the public service but the interests of the citizens were made to suffer thereby.

Even a still further injury and demoralization was inflicted upon the general public through the wild chase and scramble for office which the system invited. The time of every one of the 40,000 applicants above referred to, and often that of his friends, may have been taken up for days or weeks in the effort to secure appointment, and his business, if he had any, or that of his employers, must have suffered thereby. Only a small percentage of those applying could be appointed, as there were not nearly places enough to go around, although it was not unusual that new places were created to meet extreme demands. Probably not more than one applicant out of ten was successful, and even of those, only a few ever found the appointment a permanent advantage.

Among those who apply to the Civil Service Commission for examination, it is of frequent occurrence that men appear who have at one time or another been in the public service, and who state that that fact is a bar to them in their endeavors to secure private employment, when a change in administration has made it necessary for them to do so. The reputation of the public service seems to have been such that private employers regard it as an objection.

Under the old system appointees felt no assurance of continuing in the service beyond the term of the administration under which they were appointed (two years). For many of the positions the duties could hardly be learned within that time, and as a result not only was the work improperly done, but, owing to the inexperience of the new appointees, a larger number of persons was required to do it. It is true that some employes have retained positions from one administration to another, but the fear of removal was never absent from their thoughts and must, to some extent, have impaired their usefulness.

When a municipal election was impending, the sweeping changes expected to be made by the incoming administration demoralized every department, and the public interest suffered

thereby. The city's revenues were not fully collected and the cost of collection was greatly increased.

Thus going back through three administrations preceding the present one, the records of the Water Office, the largest revenue producing department of the city, show as follows:

BUREAU OF WATER RATE COLLECTIONS.

COMPARATIVE STATEMENT OF COLLECTIONS AND SALARIES FROM JANUARY 1ST, TO APRIL 30TH.

| YEAR. | COLLECTIONS. | SALARIES. | PER CENT. OF SALARIES TO COLLECTIONS. |
|-------|--------------|-------------|--|
| 1890, | \$378,524.11 | \$75,576.99 | 19.7 |
| 1891, | 398,579.01 | 95,448.92 | 24 |
| 1892, | 424,519.32 | 96,823.24 | 22.8 |
| 1893, | 456,994.92 | 109,618.33 | 24 |
| 1894, | 559,568.17 | 88,990.64 | 15.9 |
| 1895, | 479,703.46 | 109,390.17 | 22.8 |

During the years 1891, 1893 and 1895, general municipal elections were impending, and it will be noted that in each of these years the cost of collections for the period immediately preceding the election was materially increased, and during one of those years, notwithstanding the continued growth of the city, there was an actual shortage of about \$80,000 in the amount collected for the quarter. The Commission confidently believes that the accounts for the quarter immediately preceding the next municipal election, will make a much better showing in this respect.

A similar state of affairs is said to have existed in other departments and is chargeable, not so much to the character of these administrations, as to the vicious system then in force. That system may have been less objectionable in the early days when the city was small and the people well known to each other, but it is lamentably inadequate now, and doubtless a knowledge of this fact induced the Legislature to pass the Act establishing the merit system.

If the registration and the vote as cast at the last election is a safe criterion from which to judge, Chicago is now the most populous city in America. Its municipal affairs are of such magnitude that trained experts are required to properly conduct them. Administrative and executive ability of the highest order should be at the head of its great departments, and the best engineering

talent at its disposal for the consideration of questions touching its water supply, sewerage, the improvement and maintenance of its streets, public works and sanitary affairs. Incompetency in these positions is not only a criminal waste of the public funds, but a possible menace to the health and well-being of every citizen. Men competent to fill them could not always be found and when found could rarely be secured for the short term of service, with all the uncertainty that attached to a position in the public employ under the old system. The more extended the service, the greater the necessity of some system that recognizes merit and rewards efficiency.

REINSTATEMENTS.

The effect of the law has unquestionably been to improve the service in many ways. The rule adopted by the Commission to refuse examinations to any applicant who had been discharged from the service for *good cause* exerts a salutary influence on all persons remaining in the service. The same rule has long been in force in the Treasury Department of the United States with the best results; and so far as the Department of Police is concerned has long been required by the city ordinances of Chicago.

Under the old system, no matter what the cause for discharge may have been, if possessed of sufficient influence, any one might reasonably hope to be reinstated. As a matter of fact, the records in the different departments show that reinstatements have often been made in the past to the detriment both of the efficiency and the reputation of the service.

Under our form of government the right to hold a public office belongs to no one citizen more than to another. If any one has been tried in the public service and found unworthy of it, it is only fair that he should step aside and let others be given a chance. Under the merit system, every citizen is given free and equal opportunity to prove his fitness for the public service and to secure employment in it. It is the only system by which this can be done, and hence the only one that is absolutely fair to all, rich or poor, foreign or native born alike. It is the only system that is in harmony with the theory upon which our government is founded. An election at which the candidates appear and discuss in public the issues of the campaign and are themselves discussed by the people is the broadest kind of a competitive examination. And as the principle of competition thus underlies the selection of

the highest officers of the government, including the President, it should, through some system, as our law provides, be made to apply to the subordinate positions, thus opening equal opportunities to every citizen.

In regard to the competitive examination provided for in the Act, grave misunderstanding has existed in the public mind which the Commission would be glad to dispel. For this purpose and as a matter of general information there will be found attached to this report a number of examination papers taken at random from those that have been used in examinations held by the Commission for different positions in the public service. It has been supposed by many that these examinations were in all cases made to test the *education* or *scholarship* of the applicant. Nothing could be further from the truth. The law requires that the examinations "shall be practical in their character."

In all examinations for laborers, or for positions where only strength or mechanical skill is required, there is no written educational test whatever. For clerical and professional positions educational and technical tests are applied, but in every case, as the law requires, the examination is adapted to the requirements of the position to be filled, and the advice and the assistance of men practically acquainted with the duties of the position is availed of in preparing the papers and in conducting the examination. The report of the Chief Examiner contains full and complete information on the subject; and the attention of all interested is respectfully referred thereto.

IV. SUGGESTIONS.

At the time of its consideration by the Legislature, and since its passage, the Civil Service Law of Illinois has been a subject of keen interest and of much thoughtful comment among those interested in municipal government. This interest has not been limited to the citizens of this state nor even to those of this country. The Commission has had requests for copies of the law and rules from nearly every state in the Union. They have been and are still being used as a guide in framing similar legislation for cities in several states. A strong organization is at this time making every exertion in its power to secure for the citizens of our neighboring city of St. Louis the benefits of substantially the same law and rules that are now in force in Chicago.

It has been claimed by some that the Act is too stringent in its provisions, and that sufficient discretion is not allowed in its application. From the careful study which the Commissioners have been obliged to give the provisions of the Act, and the experience gained by them in its enforcement, they are unanimously of the opinion that this objection is not well founded. It should be remembered that the purpose of the Act was to secure an improvement in the Civil Service of cities, by making appointments and promotions in the public service depend upon the fitness of the appointee *as ascertained through competitive examination*.

If a public position is to be won through competition, then the first essential is that the competition shall be absolutely fair and equal as between all who enter it, otherwise desirable persons will not take part in it. There must be no preference given and no partiality shown to any competitor. The only discretion which the law authorizes, or which it should authorize the Commission to exercise, is in fixing the terms of the competition, and these terms must be alike for all.

The law wisely provides that "*all examinations shall be public, competitive, and free to all citizens of the United States, with specified limitations as to residence, age, health, habits and moral character*"; that "*they shall be practical in their character,*" and "*shall include tests of physical qualifications and health, and when appropriate, of manual skill*"; and that "*no questions in any examination shall relate to political or religious opinions or affiliations.*"

The above "limitations" which the law requires that the Commission shall by its rules specify, are intended for the protection of the public service, and for that purpose only. They must be reasonable, general in their terms, and apply equally to all applicants. The Commission is given no discretion or power to so adjust them as to favor citizens of any one nationality, creed, or party above those of another, and it should have no such discretion.

Every individual who has complied with the general requirements and entered a competition should be made to feel, and must be justified in feeling, that his success or failure will depend entirely upon the manner in which he acquits himself in the competition; otherwise the examination would be a cruel farce.

The law lays special stress upon "tests of physical qualifications and health," but in this it requires no more than private employers or the best managed business corporations require. For entrance

to service in the Police or Fire Departments where, in case of good behavior, the term is expected to be from twenty-five to thirty years' duration, and where in case of injury or loss of health, the incumbent is placed upon the pension roll, the public interest requires that extreme care be used in the selection of strong and healthy men. Not only does the public interest require this, but fairness to the other members of the departments requires it even more strongly, for the pensions are chiefly paid by money contributed by them.

Although the Civil Service Law has now been in force for a year and a half, it is still, to some extent, in its experimental stage. It is too early yet to fully estimate the benefits which it is expected to confer upon the public service.

Under the terms of the law, all persons in the employ of the city when the law went into effect became members of the Classified Service by the operation of the law. They are protected in their positions during good behavior by the fact that if removed the officer making the removal has no power to fill the vacancy. This is the same measure of protection which is extended by the Federal Civil Service Law to the members of the National Classified Service, and in practical operation during a series of years has been found ample and effective. It is not probable that wholesale removals will ever again be made in this city, or that removals will be made at all, except for good cause. If good cause does exist in any case, then the removal should be made and it should be made just the same whether the person was appointed before the law went into effect or afterwards. A change in the municipal administration will fairly test the value of the law, and it is firmly believed that the restraining influence that it will then exert in the matter of removals and appointments, will commend it more strongly than ever to the good opinion of the public.

The Act as it stands, has been pronounced by those most competent to judge, the best law yet passed by any legislature upon the subject of which it treats, and it is believed that it will, if properly enforced, fully accomplish the purpose for which it was enacted.

The Commission has at this time but one suggestion to make, and that is that the law be permitted to stand exactly as it is, without alteration or amendment, until further experience shall demonstrate in what particulars and to what extent it can be changed with advantage.

In conclusion, the Commission desires to acknowledge with thanks the uniform courtesy and the official aid that it has at all times received in the discharge of its duties from yourself, from the heads of the principal departments, and from the chiefs of the various bureaus with whom it has had official business to transact.

Respectfully submitted,

| | | |
|-------------------|---|----------------------|
| JOHN M. CLARK, | } | <i>Civil Service</i> |
| ROBERT A. WALLER, | | |
| CHRISTOPH HOTZ, | | |

Commissioners.

APPENDIX A.

REPORT OF THE CHIEF EXAMINER AND SECRETARY TO THE CIVIL
SERVICE COMMISSION OF THE CITY OF CHICAGO.

CHICAGO, January 14, 1897.

Gentlemen: I have the honor to submit herewith a report of the examinations held under the direction of your honorable body for the year ending December 31, 1896. Reference will also be made to examinations conducted during 1895, because when the annual report of the Chief Examiner for that year was submitted, the Civil Service Law had been in operation but a little more than four months, and the time was not sufficient to justify the expression of any judgment upon the practical results reached.

In accordance with your suggestions this report will treat of many details of the work with which you are familiar. The reason for this is that the report is intended for public distribution, and considerable misconception regarding these details apparently exists in many quarters.

In the consideration of what has been done, the subject matter of this report will be arranged under four heads:

- I. Number and kinds of examination.
- II. Method of holding examinations.
- III. Character of examinations.
- IV. Summary of results.

I. NUMBER AND KINDS OF EXAMINATION.

During 1896, 56 examinations have been held in the Official and 25 in the Labor Service, making a total for the year of 81. In the last four months of 1895, during which the statute was in operation, a total of 47 examinations was held, making a grand total of 128 examinations.

Eligible lists have been obtained for nearly all positions in the city service which are filled through original entrance, with the

exception of positions as building inspectors and places in the bridge service. The examinations for entrance to the service of the city are of two kinds, oral and written. Only oral examinations are used for entrance to all branches of the Labor Service. This applies to both skilled and unskilled laborers. Most examinations for entrance to the Official Service are written because experience has shown that the needs of the service can best be met by a written test of ability.

II. METHOD OF HOLDING EXAMINATIONS.

At the beginning of each examination a short address is made by the Chief Examiner in which the character and methods of the examination are carefully explained. Applicants are told that they are free to ask questions, and if these questions can be legitimately answered both question and answer are repeated aloud for the benefit of the whole class. No explanation is given to any one which is not given to all. Communication is absolutely prohibited, and the detection of this or any other kind of fraud is sufficient to disqualify the applicant. No effort is spared to place the applicant at his ease and to facilitate his work. The examiners are never all of the same political party.

The questions are always privately printed in the office of the Commission and kept under seal in their custody until the actual time of examination. In no case does the applicant's name appear upon his examination papers, which are marked before the name of the writer is made known. Exactly the same rules are followed in promotion examinations as obtain in those for original entrance.

In oral examinations a board of examiners is selected with special reference to the character of the examination to be conducted. In this kind of examination, *and in all examinations for entrance to the Labor Service, for either skilled or unskilled labor, no educational qualifications are required.* No questions whatever are asked which do not pertain exactly to the applicant's experience and practical capacity; the test is simply a method of finding out by word of mouth what an applicant knows about the work for which he applies. The citation of a single case will illustrate the method followed in every instance: In the examination for carpenters (for questions see page 266), the examining board was made up of three men who are practical carpenters of long and extensive experience, of unquestioned integrity, and of different political parties. All the questions were prepared by these men directly, and the examina-

tion was conducted by them. Each applicant was brought separately before this board and the questions put to him orally. Each examiner marked individually each answer of the applicant, and the marks when averaged furnished the standing of the competitor in the examination. No deviation is ever made from the rule that in all examinations the questions must be prepared and marked by examiners of extensive practical experience in the employment for which applicants are to be examined, and of high standing in their various callings. Experience has shown that the oral examination might profitably be employed in a few positions which heretofore have been filled by the written method. This is notably true of examinations for drivers for the Police and Fire Departments.

The marking of examination papers is done by experts. Each paper is marked separately by at least two people, neither of whom was present at the examination. In no case are the markers all of the same political party. There is nothing about the paper to indicate to any examiner the name of the author, except in cases where the answers to questions as to an applicant's experience may indirectly disclose his identity. This is unavoidable unless the questions with regard to experience be omitted from the examination, and the wisdom of finding out the applicant's experience in almost every case will hardly be seriously questioned. Questions involving personal experience are always the last marked. After the papers are marked, the applicants who passed the examination are brought before the Medical Board and the names of those whom the physicians accept are placed upon an eligible list in the order of their averages.

In the Police and Fire Departments the medical examinations are held first and the applicant receives a mark at the hands of the Medical Board which is averaged with his standing in the written examination. In all other cases the standing of the written or oral examination furnishes the grading, and the applicant is either accepted or rejected by the Medical Board. Explanation in detail of the methods employed by the medical examiners in all their examinations will be found in the report of that Board in Appendix B. (See page 26.)

After the eligible list has been prepared it is posted in the office of the Commission, where it is kept constantly open to public scrutiny. Whenever the head of a department makes a requisition upon the Commission to fill a vacancy, the proper eligible list is con-

sulted and the first name (or in the case of promotion, the first three names) upon that list is certified directly to the appointing officer.

Although in his application blank an applicant is obliged to furnish three vouchers (or two in the Labor Service) from responsible persons as to character, it has been the practice to make further investigation of the character of the eligibles when the names are posted. Experience has shown that too much care cannot be taken in this regard.

III. CHARACTER OF EXAMINATIONS.

As to whether the examinations have or have not been practical, perhaps the best evidence will be furnished by the questions themselves. Many of them are printed in Appendix P (see page 221) of this volume. It is to be regretted that lack of space forbade the insertion of all. Such as are not furnished, however, may be consulted in the Public Library where they have been placed on file for the benefit of the public. The character of the questions given in the examinations has been the subject of harsh and unjust criticism. These criticisms must have been based upon the complaints of unsuccessful candidates, or upon erroneous statements circulated by persons unfriendly to the merit system, rather than upon any study of the questions themselves. Those who have taken the pains to investigate have invariably expressed surprise, not that the questions are difficult and theoretical, but that they are so simple and practical.

There are on file in the Commission's office sample questions in various branches of the public service which have been used by the National Civil Service Commission, and by the Commissions of New York, Boston, and other large cities of this country and of Europe. A comparison of these with the questions used by the Chicago Commission shows the latter to be considerably simpler and easier. It has been the aim of your Examiner to find out, by the simplest methods possible, whether or not the candidate was fitted for the position desired, not to ascertain the highest limits of his knowledge of the different subjects on which he was examined. With this end in view, as a rule, only those seeking positions where some knowledge of reading, writing and arithmetic is reasonably essential to the duties of the position, are given any considerable written examination.

In the Fire and Police Departments, far more stress has been laid upon physical perfection than upon the educational attainments

of the applicant. The result has been that where 70 per cent. of those examined were rejected by the Medical Board, only about 10 per cent. of those who passed the medical examination failed mentally. The standard of the educational portion of the examinations varies naturally with the class of employment which an applicant seeks. For entrance to the Fire and Police Departments the applicant is required to show that he can read, write and spell fairly well, and that he has a slight knowledge of the four elementary principles of arithmetic. Experience has shown that little is gained by questioning him as to the duties of a police officer or fireman. Actual experience in these departments during the probationary period furnishes the best test of an individual's ability to become a good fireman or policeman. Attention is respectfully called to the educational portion of the two examinations referred to. (See pages 243, 249.)

For positions as inspectors in the Public Works Department, the educational examination is much the same as that for entrance to the Police and Fire Departments, although a little more severe. The criticism is frequently made that an educational examination for those positions discriminates against men who by practical experience have become good inspectors, but who, from force of circumstances, have been deprived of the advantages of an education. In this connection it is well to bear in mind that the work of these inspectors annually increases or decreases by hundreds of thousands of dollars the revenues of the city. The inspector is the key to the situation. It is upon his report that material furnished and work done, etc., is accepted or rejected. Is it too much to ask that he be a man of common school education? By insisting that he shall have such education, is he discriminated against any more than the world discriminates against any man whose early advantages have been limited? Should not a man upon whose judgment thousands of dollars of the taxpayer's money are expended, be able to read and write and figure a little, and to express himself with reasonable intelligence on paper? The objection is at once raised that some good inspectors are unable to meet these requirements. The answer is, that the men who are good inspectors and can meet them are more valuable for the city service than those who cannot. Respectful attention is called to the character of the questions asked of applicants for inspectorships in the Department of Public Works. (See pages 229, 254-257.)

For original entrance to the city service, mechanical engineers

are given about the same educational examination as that to which the inspectors are subjected, and for much the same reasons. In the upper grades of the service for mechanical engineers, and in original entrance for civil engineers, no test of educational qualifications is required, a sufficient knowledge in their case being presupposed. In the case of these examinations, as in other cases, attention is respectfully called to the examination questions. (See pages 233, 251, 253.) Similar knowledge is presupposed in the case of medical inspectors; but for other inspectors in the Department of Health, a slight educational test is insisted upon, and the character of this test is fully set forth in the questions asked of applicants for these various inspectorships. (See pages 223-230.)

The educational qualifications asked of foremen are similar to those required of inspectors in the Public Works Department. To the criticism that the educational requirements for foremen have been made too severe, your Examiner has only to say that if a man is a good foreman and cannot write and figure, he is a valuable employe, not because of his ignorance, but in spite of it; that a man who is his equal as a foreman and at the same time has a common school education, is his superior; and that for this reason the city should have the benefit of his services in preference to those of the other.

The educational requirements for the clerical service have, of course, varied with the grade for which the examination was held. The clerical examination for original entrance besides exercises in spelling, writing, copying and fundamental rules of arithmetic, includes writing from dictation, copying from rough draft, letter writing, fractions, decimals, percentage and interest. For the upper grades of the clerical service, the severity of the educational examination increases in proportion to the grade; and special questions as to the duties of the position applied for are often added.

Applicants for stenographic positions, in addition to the regular clerical examination undergo further tests, consisting of taking shorthand notes from dictation and in transcribing them upon the machine; also in tabulating, spacing, and copying from rough draft; and finally in reading their own stenographic notes verbally.

Candidates for the library service, besides a portion of the clerical examination, are given a comprehensive series of questions on literature, and, when the needs of the service require it, a test of their knowledge of cataloguing and indexing.

For positions in the service, not previously mentioned, the educational portion of the examination is very similar to that required of inspectors and foremen, except that for positions whose duties require no special education, such, for instance, as that of lineman, no educational qualifications whatever are required.

In marking the educational portion of the examination papers for different branches of the service, different degrees of severity are used. The papers are all marked according to the same standard but the standard varies. An illustration will explain: The penmanship paper of an applicant who desires to be a clerk is marked with severity because good penmanship is essential to good clerical work. The penmanship exercise for entrance to the Police or Fire Departments, or for a foreman or inspector, is marked with much more leniency, simple legibility being about all that is required. The fact should constantly be borne in mind that no different degree of leniency or severity is ever used in marking the papers of the several individuals in the same examination.

An important feature of the examinations has been the free use of what may be styled, for lack of a better term, the experience and duties exercise. Where examinations are written, this forms the second portion. The exercise consists of questions which bring out the applicant's practical knowledge of, and his experience in the work for which he applies. The questions are always framed by boards of examiners selected from men who have had extended practical experience in the subject under consideration. The work of preparing these important questions has never been entrusted to incompetent or inexperienced persons. Here again, the citation of an individual case will illustrate the methods employed in the whole. In the examination for civil engineers, the questions were prepared under the direct supervision of the best civil engineering ability accessible in Chicago, and the papers were marked under the same auspices. The rule just illustrated has been followed in the preparation of the questions, and in the marking of the answers of all the "experience and duties" papers.

In oral examinations, the exercise just referred to comprises the entire examination and the same rule as to the preparation and marking of the papers obtains. If an examination contains both the educational and practical portions, the marks obtained on the two exercises are combined and form the general average of the applicant. In combining these marks, greater weight is almost invariably attached to the second or duties portion of the exam-

ination. To illustrate: In the examination for many of the inspectorships the mark obtained on the second exercise, testing the applicant's actual knowledge of the subject at hand, was given a weight of two or three times that given the mark on the educational portion. Should not this fact be a very considerable answer to the comment that the educational requirements have been too severe? The practical effect has been that men who possessed special knowledge and experience in the work applied for stood highest in the examination, and this certainly should be the object sought.

In promotion examinations two other features are added to the requirements. One is what is known as an efficiency paper. In departments where the records have been so kept as to show the applicant's complete history, the head of the department submits to the Commission answers to printed questions, and from these the efficiency record of the applicant is determined. Considerable latitude is purposely given to the judgment of the department head, and applicants for promotion are given a seniority credit for each year of consecutive service. Greater weight is attached to the efficiency record than to either the educational or the duties portion of the examination. Thus an applicant with a long and honorable career in the service of the city, even if his educational advantages be very limited, and even if he be unaccustomed to expressing his knowledge on paper, is given a decided advantage over persons whose records are not so meritorious, or whose length of service is less.

IV. SUMMARY OF RESULTS.

A brief summary of the results of the year's work appears below:

17,000 application blanks have been given out in the official, and 7,500 in the labor service; of these 4,541 have been returned to the office in correct form and approved in the official, and 2,607 in the labor service; 2,529 applicants have been examined in the official service and 1,882 in the labor; 712 have passed in the official, and 1,717 in the labor; 667 have been certified in the official, and 729 in the labor, making a total number of 1,396 certified. Of course the number of certifications corresponds with the number of vacancies, and it naturally follows that there would have been more certifications if there had been more vacancies. In the tables which accompany this report, the year's work in exact detail is shown, and these statistics speak

for themselves. To persons who desire exact information, a careful study of all the tables is commended. (See page 33.)

In concluding this report two suggestions are emphasized:

First. The pressing need of an increased force, if the best results are to be secured, is urged upon your attention. Additional help will make it possible to conduct examinations more rapidly, to mark papers more expeditiously, and to make a more extended investigation of the character and general reputation of eligibles.

Second. At the present rate of growth of the Commission's work, before six months have elapsed, it will be almost impossible satisfactorily to transact the business of the department in the cramped quarters which it now occupies. Additional room for conducting the routine office work, for holding examinations, and for marking papers, is an immediate and imperative necessity, and upon securing these requisites depends in no small measure the character of the work to be done in the future.

Very respectfully,

EDWARD J. PHELPS,

Chief Examiner and Secretary.

APPENDIX B.

REPORT OF MEDICAL BOARD.

The Honorable Civil Service Commission of the
City of Chicago.

Gentlemen:—In pursuance of your request, the Medical Board has the honor to submit herewith its report from the time it entered upon its duties up to December 31st, 1896.

On the 29th of December, 1895, the Board convened, the membership consisting of M. L. Goodkind, M. D., A. R. Edwards, M. D., S. C. Plummer, M. D., Joseph R. Hawley, M. D., Secretary, and Wm. Cuthbertson, M. D., President.

The standards necessary for admission to the Classified Service of the city were discussed and adopted; the rules and procedure requisite to the conduct of the different examinations were formulated; after the adoption of which the Board was in readiness to enter upon its active duties.

This being the first annual report of the Medical Board, it is advisable to describe its duties and detail the rules and standards which govern its examinations.

As is usual with all new departures of this kind, the original standards as agreed upon by the Board were found in some instances to be impractical and liable in certain cases to work hardship. These have all been revised and the results as set forth in this report (see Appendix N) seem to the Board to be as nearly correct as possible.

DUTIES.

The Medical Board conducts the medical examination of all candidates for original entrance or promotion in every division of the Classified Service. Candidates for original entrance to the uniformed police and fire service are given also a physical examination.

The President of the Board presides at all examinations and other meetings of the Board. The Secretary, in addition to the usual duties of such position, is required to be present in the Civil Service rooms each day from 12 to 1 o'clock, for the purpose of conducting the preliminary examination as to height, weight and chest circumference of all candidates for original entrance to the uniformed police and fire service. (See schedule adopted by the Commission, page 106.) If a candidate conforms to the schedule for measurements, his application is accepted. If a discrepancy exists, he is told how to remove it, unless the failure is due to deficient height or a markedly deficient chest girth.

RULES GOVERNING EXAMINATIONS.

1. Three members of the Board constitute a quorum.
2. In examining candidates, the affirmative vote of three examiners is required to accept or reject an applicant.
3. If the physical qualifications of the candidate can be determined only by an accurate history of past health, there being only probable evidence of the nature of the disease present, the candidate shall be required to present to the Board at its next examination a certificate from the physician who treated him during the period of life involved. This certificate will determine the acceptance or rejection of a candidate and will be retained as a matter of record.
4. Any candidate who has been rejected may be re-examined within ten days from date of original examination, provided he files within said time a request in writing with the Secretary of the Commission.

Rejected candidates are told the cause or causes of their rejection at the time of examination, and at their request, will be given in writing, signed by the examiners, a statement of the cause or causes of rejection.

5. No member of the Medical Board will sustain any professional relations with a rejected or an accepted candidate for positions obtainable under the Chicago Civil Service rules.

STANDARDS FOR EXAMINATION OF ALL CANDIDATES FOR APPOINTMENT IN THE CLASSIFIED SERVICE.

These standards are based upon the nature of the duties of each position and, so far as possible, the causes for rejection are such as to elevate the standard of efficiency by keeping from the service those candidates who are physically disqualified either for

the average quantity or quality of daily work or for regular attendance, or who would be unable to continue in the service long enough to be valuable for their experience.

The nature and number of physical rejections tabulated in Appendix N, will abundantly prove the truthfulness of these conclusions.

Owing to the fact that many positions in the Classified Service require practically the same physical qualifications, they have been divided into six (6) classes, each class having a separate standard. Promotional examinations are treated separately.

The first class includes candidates for original entrance to the uniformed police and fire service. As this class requires the severest physical standards, the causes for rejection are stated in detail, and those for other classes are based upon these, the exceptions being noted. The candidates first remove all clothing (an apron being worn) and have their height, weight and chest circumference (quiescent) examined according to the schedule. (See instructions to police and fire applicants, p. 106.) Before the termination of the last examination for patrolmen, the Medical Board asked the Commission to allow the use of the following modifications of the schedule, for the examination then going on, viz.: A deficiency of 1 in. in chest girth is allowed a candidate whose height is 5 ft. 9 in. to 6 ft., if chest expansion is 3 in. or more. A deficiency of $1\frac{1}{2}$ in. in chest girth is allowed a candidate whose height is over 6 ft. if his chest expansion is 3 in. or more. The Commission allowed the modification to be used in the examination then pending, and notified all candidates who had been rejected for no other cause than deficient chest, when chest was not more than 2 inches deficient, to appear for re-examination. Sixty-five (65) appeared and thirty-three (33) were passed. The Medical Board was convinced that the modification would in no way detract from the efficiency of the eligibles, and the Commission allowed the modifications to be made permanent for both police and fire schedules.

If the candidate is deficient in height, or in other requirements of the schedule to a degree sufficient to render his acceptance impossible within ten days, he is rejected. If the deficiency can be removed within ten days, he is temporarily rejected. If he conforms to the schedule, he is then examined medically.

The technical examinations of medical inspectors are conducted by the Medical Board. Two such examinations have been held this year. The candidates are first given a written examination. The

questions asked are both practical and theoretical and intended solely to determine the candidates' usefulness and efficiency for the particular duties of the position. (See questions for medical inspectors in Appendix P.) Those candidates who pass the written examinations with a percentage of 50 or more are taken to the contagious ward of the County Hospital. Some member of the Board acts as examiner and the candidates are brought into the room, one at a time, and verbally examined upon the diagnosis of some contagious disease. The same questions are asked each candidate. A majority vote of the Board determines the percentage. In marking the papers of the written examination, the answer which refers to the medical education of the candidate is not marked until after the answers to the other questions. The President reads the answer to the first question in each of the papers. After each question is read its merits are discussed and then voted upon. A majority of all percentages voted determines the mark. All answers to the other questions are then marked in the same manner. By this method the comparative values of the answers are better determined. As in all other civil service examinations the papers are identified only by examination numbers. The final percentage is determined by giving the percentage for the written examination a weight of three, that for the clinical a weight of two. A final mark of 70 per cent. is required to pass. Candidates who pass the written examination with a mark under 50 per cent. are not allowed to take the clinical, as they could not secure a final mark of 70 per cent. even if they made 100 per cent. in the clinical test. In the two examinations fifty-five (55) candidates were examined in the written test. Of these the mark of sixteen (16) was over 50 per cent. In the clinical test eleven (11) secured a mark sufficient to pass.

These results indicate the high standards used in the technical examination and the class of men obtained justifies them.

Your attention is called to the desirability of having physicians present at the examinations to observe methods and standards.

The causes for rejection tabulated in Appendix N represent all the disqualifying diseases and conditions found by the Medical Board in its examinations for 1896. The nature of the examinations held, with the causes for rejection, are grouped so far as space would permit, according to the severity of the examination. The majority of the candidates rejected had more than one disqualifying condition. Symptoms of diseases are not named, except when the cause was not apparent.

Your attention is further called to the comparatively large number of rejections for original entrance to the police and fire departments, on account of varicose veins, heart lesions and flat feet. Rigid standards have been necessary in these cases, as it is well known that these diseases become aggravated by the duties of positions in these departments. Obesity, alcoholism, tachycardia, deficient strength, chest measurement, and weight are prominent causes of rejection. Habitual indulgence in alcohol unfits a man for the proper discharge of his duties, and the danger is the greater among patrolmen whose temptations to drink are almost unlimited. Obesity is unsightly, and when combined with weak, flabby muscles unfits a man for active work or continuous effort. The Medical Board takes pleasure in calling attention to the appearance of those who have passed the examination, as the physical development of the successful applicants is above the average, as will appear from the following report:

REPORT OF THE PHYSICAL EXAMINERS TO THE MEDICAL BOARD.

*"Gentlemen:—*Herewith we hand you a report of the physical examinations held during the year 1896.

"The physical examination is applied only to those who have passed the medical examination for original entrance to the uniformed police and fire service, and it determines their percentages for 'general physical condition.' A percentage of 65 is required to pass. The physical examination has two divisions, one of which examines the 'development,' the other the 'strength.'

"The percentage for 'development' is determined by a series of percentages which are given for the following measurements: Relations of height to weight, and of girth and depth of abdomen to girth and depth of chest, the measurements of girth and depth of chest and abdomen and the circumference of biceps, forearm, thigh and calf. The 'muscular condition' is given a percentage which has the highest value. The percentages given these measurements are multiplied by a series of 'weights,' by which the relative value of the percentages is determined. The sum of these products is divided by the sum of the weights and the percentage for 'development' thus secured.

"The percentage for 'strength' is determined by percentages and weights in the same manner. The following tests are used: Capacity of lungs tested by a spirometer; strength of lungs by a manometer; strength of the muscles of the back, legs, forearm,

chest, abdomen and the traction pull, by specially prepared manometers. Strength of the upper arm is tested by having candidate 'chin' on a ladder and 'dip' on parallel bars. If the sum of dipping and chinning equals 20, a percentage of 100 is given, which is a basis for the other percentages of this test.

"Candidates are also required to 'put up' dumb bells; 100 per cent. is given if a 75-pound dumb bell can be 'put up' with each arm. Agility is tested by the height a candidate can jump after running rapidly around the room five minutes. A jump of $3\frac{1}{2}$ feet while applicant is exhausted from running secures a percentage of 100. The candidates for fire service have two other tests, the 'ladder' and the 'rope' tests; the former test is executed on three suspended ladders, the latter on a 50-foot rope, loosely hung across the room. Percentages are based upon the distance, rate and perfectness of the climbing, which is all done with the hands.

"The percentage for 'strength' multiplied by 2, that for 'development' by 1, and the product divided by 3 gives the percentage for general physical condition.

"The tests are free from any 'knack' and the candidates are informed of the nature of the tests before the examination. (See instructions to police and fire applicants in Appendix M.)

RESULT OF EXAMINATIONS FOR 1896.

PATROLMEN, PATROL AND FIRE DRIVERS.

| | |
|-----------------------------------|-----------------------------|
| *Whole number examined..... | 324 |
| Whole number rejected..... | 13 |
| Percentage of rejections..... | 4.01% |
| Number failed in development..... | 2 |
| Number failed in strength..... | 8 |
| Number failed in both..... | 3 |
| "Of the 311 passed, the marks of | 15 were between 65 and 70% |
| " " " " " " | 113 were between 70 and 80% |
| " " " " " " | 144 were between 80 and 90% |
| " " " " " " | 39 were between 90 and 100% |

"The low percentage of rejections and the high percentages secured by a majority of candidates accepted in the physical examination indicate the value of the high standards used in the medical examination.

Respectfully submitted,

ARTHUR R. EDWARDS, M. D.,

JOSEPH R. HAWLEY, M. D.,

Physical Examiners."

*Excluding 36 examined physically in 1895 and in duties in 1896, and including 8 that failed to appear for educational examination.

In conclusion the members of the Board desire to express their thanks to the Civil Service Commission for the kindness and courtesy which has been shown them in their efforts to satisfactorily discharge the duties, arduous and trying in their nature, connected with their work. The Board, while not claiming infallibility, has endeavored to faithfully carry out the aim and intent of the Civil Service Law, and it has been encouraged by the appreciation and unfailing support of the Civil Service Commission.

We have the honor to be,

Very respectfully yours,

WM. CUTHBERTSON, M.D.,
JOSEPH R. HAWLEY, M.D.,
ARTHUR R. EDWARDS, M.D.,
MAURICE L. GOODKIND, M.D.,
SAMUEL C. PLUMMER, M.D.

APPENDIX C.

TABLES OF STATISTICS.

TABLE I.—GENERAL SUMMARY.

| | Number of Applications Filed. | | | Number Examined. | | | Number Passed. | | | Per Cent. of Those Examined Passed. | | | Number Certified for Appointm't. | | |
|---------------------|-------------------------------|-------|--------|------------------|-------|--------|----------------|-------|--------|-------------------------------------|-------|--------|----------------------------------|-------|--------|
| | 1895. | 1896. | Total. | 1895. | 1896. | Total. | 1895. | 1896. | Total. | 1895. | 1896. | Total. | 1895. | 1896. | Total. |
| Official Service... | 2273 | 4541 | 6814 | 1690 | 2529 | 4225 | 648 | 712 | 1360 | 38.21 | 28.15 | 32.19 | 119 | 667 | 786 |
| Labor Service... | 1552 | 2607 | 4159 | 395 | 1882 | 2277 | 329 | 1717 | 2046 | 83.29 | 91.23 | 89.86 | 68 | 729 | 797 |
| Totals | 3825 | 7148 | 10973 | 2091 | 4411 | 6502 | 977 | 2429 | 3406 | 46.72 | 55.07 | 52.38 | 187 | 1396 | 1583 |

TABLE II.—EXAMINATIONS BY MEDICAL BOARD.

| | Fire Departm't. | | | Police Departm't. | | | Other Branches of the Official Service. | | | Labor Service. | | | Totals. | | |
|---------------------|------------------|----------------|-------------------|-------------------|----------------|-------------------|---|----------------|-------------------|------------------|----------------|-------------------|------------------|----------------|-------------------|
| | Number Examined. | Number Passed. | Per Cent. Passed. | Number Examined. | Number Passed. | Per Cent. Passed. | Number Examined. | Number Passed. | Per Cent. Passed. | Number Examined. | Number Passed. | Per Cent. Passed. | Number Examined. | Number Passed. | Per Cent. Passed. |
| Original Entrance.. | 79 | 50 | 63.29 | 1128 | 289 | 25.62 | 435 | 377 | 86.67 | 1882 | 1801 | 95.70 | 3524 | 2517 | 71.42 |
| Promotion | 33 | 33 | 100 | 3 | 3 | 100 | 22 | 22 | 100 | ..... | ..... | ..... | 58 | 58 | 100 |
| Totals..... | 112 | 83 | 74.11 | 1131 | 292 | 25.82 | 457 | 399 | 87.31 | 1882 | 1801 | 95.70 | 3582 | 2575 | 71.89 |

TABLE III.—OFFICIAL SERVICE (Original Entrance).

| Number of Examination. | KIND OF EXAMINATION. | WHEN HELD. | Number Examined. | | EDUCATION. | | | NATIVITY. | | | Miscellaneous. | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------|---------------------------------------|------------|------------------|----------------|--------------|----------------|--------------|-----------|--|-------------------------------|----------------|----------------|-------|--------|----------|--------|-------|---------|-------|--------|--------|--------|-------|---------------|-------|--------|-------|--------|-------|--------|-------|-------|-------|-------|
| | | | Number Examined. | Number Passed. | Average Age. | Educational. | | | Examination Regarding Experience and Duties. | Examination by Medical Board. | | United States. | | | British. | | | German. | | | Irish. | | | Scandinavian. | | | | | | | | | | |
| | | | | | | Common School. | High School. | College. | | | | Examination. | Ex't. | P's'd. | Ex't. | P's'd. | Ex't. | P's'd. | Ex't. | P's'd. | Ex't. | P's'd. | Ex't. | P's'd. | Ex't. | P's'd. | Ex't. | P's'd. | Ex't. | P's'd. | | | | |
| 48 | Drivers (Fire Dept.).. | Feb. | 4. | 36 | 21 | 58.33 | 242 | 24.7 | 24.7 | 33 | 19 | 2 | 1 | 1 | 1 | ..... | 36 | 21 | 36 | 98 | 31 | 19 | 2 | 1 | ..... | 2 | 0 | ..... | 1 | 1 | ..... |  |  |  |
| 49 | Ass't. Chemists..... | " 12. | 3 | 6 | 3 | 50 | 127 | 23 | 23 | 1 | 1 | 1 | 0 | 4 | 2 | ..... | 6 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 0 | ..... | 1 | 0 | ..... | 2 | 0 | ..... |  |  |
| 50 | Medical Inspectors... | Mar. | 14. | 15 | 3 | 16.67 | 332 | 331 | 31 | 2 | 1 | 1 | 0 | 15 | 2 | ..... | 18 | 3 | 3 | 3 | 14 | 3 | 2 | 0 | ..... | 3 | ..... | ..... | 2 | 0 | ..... |  |  |  |
| 51 | Library..... | " 17. | 1 | 22 | 0 | 13.04 | 222 | 22.3 | 11 | 1 | 12 | 2 | ..... | 23 | 15 | ..... | 23 | 3 | 3 | 3 | 19 | 2 | 1 | 2 | 0 | ..... | 1 | 0 | ..... | ..... | ..... | ..... |  |  |
| 52 | Janitors..... | " 21. | 30 | 15 | 50 | 40 | 36.2 | 29 | 14 | ..... | 1 | ..... | ..... | ..... | ..... | ..... | 23 | 17 | 30 | 21 | 10 | 6 | 3 | 3 | 4 | 1 | 6 | 3 | 5 | 2 | 0 | ..... |  |  |
| 53 | Janitresses..... | " 21. | 31 | 29 | 29 | 56 | 36 | 35.7 | 31 | 29 | 4 | 1 | 1 | ..... | ..... | ..... | 31 | 31 | 31 | 29 | 12 | 11 | 3 | 3 | 6 | 5 | 7 | 7 | 2 | 1 | 1 | ..... |  |  |
| 54 | Elevator Men..... | " 21. | 10 | 5 | 5 | 32 | 9.25 | 9 | 4 | ..... | 5 | 2 | 3 | ..... | ..... | ..... | 8 | 5 | 10 | 8 | 8 | 5 | ..... | ..... | ..... | 1 | 0 | 1 | 0 | ..... | ..... | ..... |  |  |
| 55 | Watchmen..... | " 24. | 55 | 29 | 29 | 52.72 | 211 | 139 | 50 | 25 | 5 | 4 | ..... | ..... | ..... | ..... | 36 | 29 | 55 | 36 | 18 | 12 | 4 | 3 | 2 | 18 | 8 | 5 | 3 | 2 | 1 | ..... |  |  |
| 70 | Ass't. Civ. Engineers. | April 15. | 18 | 3 | 3 | 16.67 | 31 | 828.7 | 4 | 0 | 6 | 2 | 8 | 1 | ..... | ..... | 18 | 5 | 3 | 15 | 2 | 2 | 1 | 1 | 0 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  |
| 72 | Ass't. Electrical Instrument Makers.. | " 23. | 8 | 1 | 1 | 12.50 | 25 | 835 | 6 | 1 | 2 | 0 | ..... | ..... | ..... | ..... | 8 | 9 | 1 | 1 | 6 | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  |
| 73 | Linemen..... | " 23. | 21 | 7 | 7 | 33.33 | 7 | 27 | 929.4 | 20 | 6 | 1 | ..... | ..... | ..... | ..... | 21 | 8 | 7 | 7 | 16 | 5 | 1 | 0 | ..... | ..... | 3 | 1 | 1 | ..... | ..... | ..... | ..... |  |
| 74 | Arc Lamp Repairers. | " 23. | 1 | 1 | 100 | 20 | 20 | 20 | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  |
| 75 | Arc Lamp Trimmers. | " 23. | 15 | 6 | 40 | 6 | 26 | 928.7 | 15 | 6 | ..... | ..... | ..... | ..... | ..... | ..... | 15 | 7 | 6 | 6 | 11 | 4 | 1 | 1 | 1 | ..... | ..... | 1 | 0 | 1 | ..... | ..... | ..... |  |
| 76 | Telephone Operators. | " 23. | 40 | 8 | 20 | 8 | 26 | 125.5 | 29 | 4 | 7 | 3 | 4 | 1 | 40 | 25 | 40 | 9 | 8 | 38 | 8 | 1 | 0 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |  |
| 77 | Ward and Street Inspectors..... | " 25. | 63 | 5 | 13 | 22.06 | 638 | 133.7 | 49 | 8 | 16 | 5 | 3 | 2 | 68 | 28 | 68 | 17 | 17 | 15 | 44 | 11 | 10 | 2 | 4 | 0 | 4 | 2 | ..... | ..... | ..... | ..... | ..... |  |
| 78 | Water Pipe Insp's... | " 25. | 7 | 2 | 2 | 28.57 | 37 | 139 | 4 | 1 | 2 | 1 | 0 | 7 | 2 | | 2 | 5 | 2 | 2 | 5 | 1 | 1 | 1 | | | | | | | | | | |
| 79 | Paving Inspectors... | " 28. | 96 | 10 | 10 | 10.42 | 10 | 42 | 93.3 | 72 | 2 | 20 | 7 | 4 | 1 | 96 | 42 | 96 | 11 | 11 | 10 | 55 | 8 | 9 | 1 | 8 | 0 | 16 | 1 | 2 | 0 | 6 | 0 | |
| 80 | Mason Inspectors... | " 30. | 36 | 7 | 7 | 19.33 | 7 | 40 | 439.3 | 31 | 3 | 5 | 4 | | | | 36 | 10 | 36 | 8 | 7 | 17 | 5 | 3 | 0 | 2 | 2 | 1 | 0 | 1 | 0 | 1 | 0 | |
| 81 | Material Inspectors. | " 30. | 46 | 7 | 15 | 22.21 | 143 | 243 | 40 | 3 | 3 | 2 | 3 | 1 | 46 | 15 | 45 | 9 | 9 | 7 | 27 | 6 | 4 | 0 | 1 | 0 | 6 | 4 | 1 | 4 | 0 | ..... | ..... |  |
| 82 | Plumbing Inspectors. | May | 17 | 6 | 6 | 35.29 | 32 | 631.5 | 15 | 5 | 2 | 1 | ..... | ..... | ..... | 17 | 9 | 17 | 11 | 9 | 6 | 12 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | ..... | ..... |  |
| 83 | Mining Inspectors... | " 2. | 19 | 4 | 4 | 44.44 | 2 | 41 | 43.5 | 7 | 3 | 1 | 0 | 1 | 1 | 9 | 5 | 9 | 7 | 4 | 5 | 3 | 1 | 0 | | | 3 | 1 | | | | | | |
| 84 | House Drain Insp's... | " 2. | 13 | 8 | 8 | 53.33 | 37 | 436.4 | 12 | 6 | 1 | 0 | 2 | 2 | 15 | 8 | 15 | 10 | 8 | 8 | 11 | 8 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | | | | |
| 85 | Steward Inspectors.. | " 2. | 25 | 3 | 3 | 12 | 42 | 347.7 | 18 | 3 | 5 | 0 | 2 | 0 | 25 | 9 | 25 | 3 | 3 | 3 | 16 | 2 | 2 | 1 | 3 | 0 | 1 | 0 | 1 | 0 | 2 | 0 | | |
| 87 | Ass't. Bacteriologists | June | 3. | 3 | 2 | 66.67 | 1 | 38 | 30 | 1 | 0 | | | | | | 3 | 2 | 2 | 2 | 2 | 1 | | | | | | | | | | | | |
| 88 | Milk Testers..... | " 3. | 5 | 2 | 2 | 40 | 1 | 27 | 822.5 | | | | | | | | | 5 | 2 | 2 | 4 | 2 | | | | | | | | | | | | |

TABLE III.—OFFICIAL SERVICE (Original Entrance)—Continued.

| Number of Examination. | KIND OF EXAMINATION. | WHEN HELD. | Number Examined. | | Per Cent. of those Examined Passed. | Number Certified for Appointment. | EDUCATION. | | | | NATIVITY. | | | | | | | | | | | | | | | | | |
|------------------------|--------------------------------|------------|------------------|--------|-------------------------------------|-----------------------------------|----------------|-------|--------------|-------|-----------|-------|--------------------------|----------------------------------|-------|----------------|----------------|-------|----------|-------|---------|-------|--------|-------|---------------|-------|----------------|-------|
| | | | Men. | Women. | | | Common School. | | High School. | | College. | | Educational Examination. | Examining Experience and Duties. | | Medical Board. | United States. | | British. | | German. | | Irish. | | Scandinavian. | | Miscellaneous. | |
| | | | | | | | Ex'd. | Ps'd. | Ex'd. | Ps'd. | Ex'd. | Ps'd. | | Ex'd. | Ps'd. | | Ex'd. | Ps'd. | Ex'd. | Ps'd. | Ex'd. | Ps'd. | Ex'd. | Ps'd. | Ex'd. | Ps'd. | | Ex'd. |
| 89 | Gas Inspectors. | June 3. | 11 | ..... | 45.45 | ..... | 37.836 | 5 | 1 | 4 | 3 | 2 | 1 | 11 | 6 | ..... | 6 | 5 | 8 | 5 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 90 | Guards, House of Correction. | " 3. | 16 | ..... | 43.75 | 2 | 29.329.1 | 12 | 6 | 4 | 1 | ..... | ..... | 16 | 11 | ..... | 11 | 7 | 12 | 4 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 92 | Patrolmen. | " 17. | 319 | ..... | 28.21 | 173.28 | 327.9 | 285 | 80 | 19 | 7 | 15 | 3 | 112 | 98 | ..... | 319 | 104 | 197 | 54 | 20 | 4 | ..... | ..... | ..... | ..... | ..... | ..... |
| 93 | Street Dist. Foremen | " 20. | 75 | ..... | 34.67 | ..... | 41.441 | 57 | 18 | 14 | 8 | 4 | 0 | 7 | 54 | 75 | 26 | 26 | 50 | 21 | 4 | 1 | 5 | 1 | 2 | 1 | 5 | 4 |
| 102 | Paving Inspectors. | July | 29 | ..... | 35.19 | 19 | 40.336.4 | 53 | 18 | 1 | 1 | ..... | ..... | 54 | 40 | 54 | 22 | 19 | 39 | 16 | 7 | 1 | 5 | 2 | 2 | 0 | 1 | 0 |
| 103 | Mason Inspectors. | " 30. | 24 | ..... | 54.17 | 4 | 38.437.9 | 21 | 12 | 2 | 0 | 1 | 1 | 24 | 16 | 24 | 14 | 14 | 13 | 15 | 8 | 2 | 3 | 1 | 0 | 2 | 2 | 0 |
| 104 | Telephone Operators. | " 31. | 28 | ..... | 35.71 | 1 | 25.624.7 | 28 | 10 | ..... | ..... | ..... | ..... | 28 | 22 | 28 | 11 | 11 | 10 | 22 | 8 | 2 | 1 | 0 | 2 | 1 | 0 | 2 |
| 105 | Medical Inspectors. | Sept. | 3 | ..... | 21.62 | 3 | 32.926 | 8 | 2 | 1 | 1 | 28 | 5 | ..... | ..... | 37 | 8 | 8 | 30 | 7 | 1 | 1 | ..... | ..... | ..... | ..... | ..... | ..... |
| 106 | Linemen (Aerial). | " 4. | 9 | ..... | 55.56 | 5 | 29.28.4 | 8 | 5 | 1 | 0 | ..... | ..... | ..... | ..... | 9 | 5 | 9 | 7 | 4 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 107 | " (Underground) | " 4. | 3 | ..... | ..... | ..... | 27.737.7 | 2 | 2 | 1 | 1 | ..... | ..... | ..... | ..... | 3 | 3 | 3 | 3 | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 110 | Drivers (Police Dept.) | " 8. | 26 | ..... | 0 | 330.7 | 0 | 26 | 0 | ..... | ..... | ..... | ..... | 3 | 2 | 3 | 0 | 26 | 3 | 19 | 0 | ..... | ..... | ..... | ..... | ..... | ..... | ..... |
| 111 | " (Fire Dept.) | " 8. | 43 | ..... | 25.58 | ..... | 25.927.4 | 42 | 11 | 1 | 0 | ..... | ..... | 14 | 12 | 14 | 13 | 43 | 14 | 36 | 9 | 1 | 0 | 4 | 1 | 0 | 1 | 0 |
| 112 | Tenement Inspectors | " 10. | 70 | 6 | 9.21 | 2 | 36.932.6 | 67 | 6 | 5 | 0 | 4 | 1 | 76 | 52 | 76 | 7 | 7 | 52 | 6 | 5 | 0 | 6 | 0 | 9 | 1 | 0 | 1 |
| 113 | Fumigators | " 10. | 24 | ..... | 20.83 | 2 | 35.927 | 20 | 3 | 2 | 0 | 2 | 2 | 24 | 12 | 24 | 5 | 5 | 12 | 4 | 1 | 1 | 7 | 0 | 2 | 0 | 1 | 0 |
| 114 | Meat Inspectors. | " 10. | 34 | ..... | 2.94 | 23.7 | 125.32 | 32 | 1 | 1 | 0 | 1 | 0 | 34 | 14 | 34 | 1 | 1 | 20 | 1 | 5 | 0 | 3 | 0 | 2 | 0 | 1 | 0 |
| 115 | Rodmen | " 15. | 37 | ..... | 21.62 | 11.31 | 29.8 | 32 | 6 | 1 | 1 | 4 | 1 | 37 | 24 | 37 | 8 | 8 | 23 | 4 | 6 | 2 | 2 | 0 | 3 | 1 | 1 | 0 |
| 116 | Ass't. Civ. Engineers. | " 15. | 15 | ..... | 20 | 1 | 32.934.3 | 5 | 0 | 2 | 0 | 8 | 3 | ..... | ..... | 15 | 3 | 3 | 13 | 3 | 1 | 6 | ..... | ..... | ..... | ..... | ..... | ..... |
| 119 | Stenographers. | " 22. | 3 | ..... | 41.67 | 6 | 25.824 | 14 | 4 | 9 | 6 | 1 | 0 | 24 | 24 | 24 | 10 | 10 | 22 | 10 | 1 | 0 | ..... | ..... | ..... | ..... | ..... | ..... |
| 120 | Foremen, Water Pipe Extension. | Oct. 2. | 34 | ..... | 70.59 | ..... | 38.939.3 | 33 | 23 | 1 | 1 | ..... | ..... | 34 | 34 | 34 | 26 | 24 | 21 | 17 | 3 | 2 | 1 | 1 | 1 | 1 | 3 | 2 |
| 122 | Mechanical Engineers | " 15. | 65 | ..... | 9.23 | ..... | 35.336 | 53 | 5 | 6 | 0 | 6 | 1 | ..... | ..... | 65 | 6 | 6 | 44 | 4 | 8 | 1 | 5 | 1 | 1 | 0 | 4 | 0 |
| 126 | Patrolmen | " 31. | 78 | ..... | 22.35 | 151 | 28 | 769 | 167 | 11 | 6 | 3 | 2 | 182 | 175 | ..... | 783 | 182 | 483 | 117 | 54 | 15 | 36 | 6 | 147 | 29 | 47 | 6 |
| 127 | Mechanical Engineers | Nov. 113 | 51 | ..... | 35.29 | 12 | 36.836.4 | 46 | 14 | 3 | 2 | 2 | 2 | 51 | 47 | 51 | 23 | 20 | 18 | 34 | 10 | 8 | 4 | 0 | 3 | 2 | 1 | 1 |
| | Totals | | 2338 | 89 | 609 | 45 | 26.95 | 498 | ..... | ..... | ..... | ..... | ..... | 39 | 1226 | 833 | 1211 | 414 | 1642 | 716 | 1582 | 447 | 182 | 55 | 139 | 26 | 350 | 85 |
| | | | | | | | | | | 187 | 74 | 132 | 39 | 1226 | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

(a) Some certified were examined in 1895.

(b) Examination 71 was supplementary to examination 32, held Nov. 8, 1895.

TABLE IV.—LABOR SERVICE.

| No. of Examinee- tion. | CLASS OF LABOR. | EXAM- INATION OF. WHEN HELD. | Number Exam- ined. | Number Passed. | Per Cent. of those Exam'd Passed. | Number Certified for Employ- ment. | Average Exam'd of those Exam'd. | Average Age of those Passed. | Examination Re- sults by Med- ical Board. | | | | U. S. | | | | British. | | Ger- man. | | Irish. | | Italian. | | Polish. | | Rus- sian. | | Scandi- navian. | | Miscel. | |
|---------------------------|---------------------------------|--|-----------------------|----------------|--------------------------------------|--|------------------------------------|---------------------------------|---|-------|---------|-------|---------|-------|---------|-------|----------|-------|--------------|-------|---------|-------|----------|-------|---------|-------|---------------|-------|--------------------|-------|---------|-------|
| | | | | | | | | | Passed. | Ex'd. | Passed. | Ex'd. | Passed. | Ex'd. | Passed. | Ex'd. | Passed. | Ex'd. | Passed. | Ex'd. | Passed. | Ex'd. | Passed. | Ex'd. | Passed. | Ex'd. | Passed. | Ex'd. | Passed. | Ex'd. | Passed. | Ex'd. |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 56 | Blacksmiths. | Apr. 2-3. | 6 | 3 | 50 | 3 | 41.2 | 43.7 | 9 | 4 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 57 | Stationary Firemen | " 2-3. | 30 | 15 | 50 | 15 | 36.9 | 32.1 | 2 | 1 | 1 | 1 | 11 | 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 58 | Iron Frame Workers | " 2-3. | 3 | 2 | 66.7 | 2 | 46.5 | 53 | 2 | 1 | 1 | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 59 | Machinists | " 2-3. | 10 | 6 | 60 | 6 | 42.1 | 40.2 | 10 | 10 | 6 | 6 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 60 | Oilers | " 2-3. | 15 | 7 | 46.7 | 7 | 36 | 39 | 15 | 9 | 9 | 7 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 61 | Carpenters | " 4. | 91 | 67 | 73.63 | 12 | 43.8 | 42.3 | 82 | 91 | 71 | 26 | 24 | 15 | 12 | 13 | 7 | 17 | 12 | 13 | 7 | 17 | 12 | 13 | 7 | 17 | 12 | 13 | 7 | 17 | 12 | 13 |
| 62 | Cabinet Makers. | " 4. | 2 | 0 | 0 | 0 | 39 | 0 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 63 | Calkers | " 4. | 4 | 100 | 100 | 33.5 | 33.5 | 33.5 | 4 | 4 | 4 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 64 | Timbers. | " 4. | 9 | 5 | 55.56 | 37.1 | 40.6 | 40.6 | 8 | 8 | 8 | 5 | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 65 | Pavers. | " 8. | 13 | 8 | 61.54 | 8 | 44.7 | 46 | 13 | 9 | 13 | 11 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 66 | Masons. | " 8. | 14 | 12 | 85.71 | 4 | 38.2 | 39.5 | 14 | 13 | 14 | 12 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 67 | Painters | " 8. | 18 | 9 | 50 | 7 | 44 | 39.3 | 18 | 17 | 17 | 9 | 8 | 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 68 | Whitewashers and Calciminers. | " 8. | 2 | 0 | 0 | 0 | 45 | 0 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 69 | Plumbers and Gasfitters. | " 8. | 5 | 1 | 20 | 1 | 26.8 | 44 | 5 | 2 | 4 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 86 | Labors: (a) Street Dep't. | May 11. | 1038 | 1013 | 97.59 | 466 | 41.4 | 41 | 1038 | 1013 | 1013 | 1013 | 57 | 57 | 42 | 42 | 9 | 9 | 152 | 146 | 145 | 131 | 512 | 509 | 31 | 30 | 43 | 43 | 19 | 18 | 28 | 28 |
| | (b) Sewer Dep't. | " 26 Sep. | 118 | 118 | 100 | 61 | 33.1 | 33.1 | 118 | 118 | 118 | 118 | 52 | 52 | 12 | 12 | 1 | 1 | 2 | 2 | 2 | 23 | 77 | 77 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | (c) Water Pipe Extension | " | 138 | 138 | 100 | 89 | 38 | 38 | 138 | 138 | 138 | 138 | 41 | 41 | 1 | 1 | 8 | 8 | 22 | 22 | 22 | 23 | 71 | 27 | 27 | 8 | 8 | 2 | 2 | 5 | 5 | 13 |
| | (d) Tappers (Water Dep't.) | " | 2 | 2 | 100 | 2 | 33 | 33 | 2 | 2 | 2 | 2 | 11 | 11 | 0 | 0 | 1 | 1 | 5 | 5 | 5 | 17 | 17 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | (e) Shut off Men (Water Dep't.) | " | 37 | 37 | 100 | 37 | 42 | 42 | 37 | 37 | 37 | 37 | 11 | 11 | 0 | 0 | 1 | 1 | 2 | 2 | 2 | 9 | 8 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| | (f) Pipe Yards. | " | 32 | 30 | 93.75 | 41 | 41.5 | 40.5 | 32 | 30 | 30 | 30 | 6 | 6 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 11 | 11 | 5 | 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | (g) Sewer Cleaning | " | 25 | 25 | 100 | 4 | 27 | 27 | 25 | 25 | 25 | 25 | 6 | 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 11 | 11 | 5 | 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | (h) Police Construction Dep't. | " | 1 | 1 | 100 | 1 | 33.4 | 33.4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | (i) Coal Passers | " | 5 | 5 | 100 | 4 | 38.3 | 34 | 5 | 5 | 5 | 5 | 3 | 3 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | (j) Repair Shop (Water Dep't.) | " | 6 | 6 | 100 | 3 | 35 | 35 | 6 | 6 | 6 | 6 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | (k) City Dump | " | 1 | 1 | 100 | 1 | 35 | 35 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | (l) Water Works. | " | 2 | 2 | 100 | 1 | 49 | 49 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | (m) Bridge Repairs. | " | 8 | 8 | 100 | 8 | 38 | 38 | 8 | 8 | 8 | 8 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | (n) Riggers at Water Works | " | 1 | 1 | 100 | 1 | 27 | 27 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | (o) Police Dep't. | " | 1 | 1 | 100 | 1 | 30 | 30 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | (p) Meter Repairs. | " | 3 | 3 | 100 | 2 | 48.3 | 48.3 | 3 | 3 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | (q) Catch Basins. | " | 1 | 1 | 100 | 1 | 51 | 51 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 94 | Water Boys | July 6 | 5 | 4 | 80 | 4 | 15.8 | 15.5 | 5 | 4 | 4 | 4 | 5 | 4 | 0 | 0 | 0 | 0 | 3 | 3 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 97 | Machinists | " 27 | 27 | 18 | 66.25 | 3 | 37.5 | 40.2 | 32 | 29 | 29 | 18 | 13 | 13 | 3 | 3 | 3 | 3 | 1 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 98 | Oilers | " 27 | 20 | 9 | 34.62 | 2 | 32 | 31.7 | 26 | 22 | 23 | 9 | 12 | 5 | 6 | 2 | 2 | 2 | 1 | 2 | 1 | 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 99 | Plumbers | " 28 | 4 | 1 | 25 | 1 | 27.3 | 27.3 | 4 | 4 | 4 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 6 | 6 | 6 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 100 | Pavers. | " 28 | 21 | 16 | 76.19 | 8 | 41.1 | 38.1 | 21 | 16 | 21 | 21 | 16 | 13 | 3 | 3 | 3 | 3 | 6 | 5 | 5 | 9 | 6 | 6 | 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 101 | Painters | " 28 | 20 | 17 | 85 | 10 | 32.5 | 32 | 20 | 19 | 20 | 18 | 11 | 10 | 10 | 10 | 10 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 108 | Coal Passers. | Sept. 4. | 19 | 16 | 84.21 | 3 | 39.7 | 37.5 | 19 | 16 | 19 | 18 | 11 | 10 | 10 | 10 | 10 | 4 | 4 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 109 | Stat'y Firemen (Comm'n Furnace) | " 4. | 4 | 42 | 33 | 78.57 | 3 | 34.8 | 42 | 40 | 42 | 35 | 3 | 3 | 3 | 3 | 3 | 5 | 5 | 5 | 4 | 2 | 8 | 8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 117 | " (Lewley Furnace) | " 4. | 4 | 4 | 100 | 4 | 34 | 34 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 118 | " (Murphy Furnace) | " 4. | 9 | 7 | 77.78 | 1 | 32 | 31 | 9 | 9 | 9 | 7 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Totals | | | 1882 | 1717 | 91.23 | 711 | 41.4 | 41 | 1882 | 1801 | 1832 | 1737 | 296 | 256 | 56 | 54 | 68 | 53 | 245 | 217 | 374 | 328 | 631 | 624 | 42 | 41 | 49 | 48 | 66 | 48 | 55 | 48 |

TABLE V.—OFFICIAL SERVICE (Promotion.)

| Number of Examination. | KIND OF EXAMINATION. | When Held. | Number Examined. | | Per Cent. of those Examined Passed. | Number Promoted. | Educational Examination. | | Technical Examination. | | Number Passed in both Educational and Technical Examinations. | Efficiency | | Record. | Examination by Medical Board. | Seniority Record (years contin's. service) of those Pass'd. | |
|------------------------|--------------------------------|------------|------------------|---------|-------------------------------------|------------------|--------------------------|---------|------------------------|---------|---|------------|---------|---------|-------------------------------|---|----------|
| | | | Examined. | Passed. | | | Examined. | Passed. | Examined. | Passed. | | Examined. | Passed. | | | Maximum. | Minimum. | Average. |
| 91 | 1st. Class Cpts. (Fire Dep't.) | June 12 | 10 | 7 | 70 | 2 | 10 | 7 | 10 | 7 | 7 | 7 | 7 | 7 | 22 | 10 | 16.3 |
| 95 | Clerks (Public Works Dep't.) | July 21 | 26 | 13 | 50 | 1 | 26 | 13 | | | 13 | 13 | 13 | 13 | 1 | 0 | .85 |
| 96 | Clerks (Public Works Dep't.) | July 22 | 6 | 4 | 66.67 | 2 | 6 | 4 | | | 4 | 4 | 4 | 4 | 1 | 0 | .75 |
| 121 | Mechanical Engineers..... | Oct. 6. | 15 | 5 | 33.33 | 3 | 15 | 6 | 15 | 6 | 5 | 5 | 5 | 5 | | | |
| 123 | Ass't. Engineers (Fire Dep't.) | Oct. 30. | 25 | 17 | 68 | 5 | 25 | 25 | 25 | 23 | 23 | 23 | 17 | 17 | 6 | 0 | 3. |
| 124 | Telegraph Operators..... | Oct. 31 | 5 | 4 | 80 | 1 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 14 | 9 | 11.5 |
| 125 | Ass't. Telegraph Operators.. | Oct. 31. | 11 | 5 | 45.45 | 1 | 11 | 11 | 11 | 5 | 5 | 5 | 5 | 5 | 13 | 4 | 7.4 |
| 128 | Clerks (Police Dep't.)..... | Nov. 14 | 4 | 3 | 75 | 1 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 0 | 1.7 |
| Totals..... | | | 102 | 58 | 56.86 | 16 | 102 | 75 | 70 | 49 | 65 | 60 | 53 | 58 | 58 | | |

TABLE VI.—OFFICIAL SERVICE (Promotion.)

Showing results of Examinations begun in 1895 and unfinished at time of First Annual Report.

| Number of Examination. | KIND OF EXAMINATION. | When Held. | Number Examined. | | | Per Cent. of those Examined Passed. | Number Promoted. | Educational Examination. | | Technical Examination. | | Number Passed in both Educational and Technical Examinations. | Efficiency Record. | | Examination by Medical Board. | Seniority Record (years contin's. service) of those Pass'd. | | |
|------------------------|--|------------|------------------|---------|-----------|-------------------------------------|------------------|--------------------------|-----------|------------------------|-----------|---|--------------------|----|-------------------------------|---|-----|------|
| | | | Examined. | Passed. | Examined. | | | Passed. | Examined. | Passed. | Examined. | | Passed. | | | | | |
| 35 | 3d and 4th Class Pipemen and Truckmen..... | Dec. 2 | 40 | 27 | 67.50 | 27 | 40 | 33 | 40 | 33 | 28 | 28 | 27 | 27 | 2 | 0 | 9.6 | |
| 36 | 1st and 2d Class Pipemen and Truckmen..... | Dec. 3 | 35 | 6 | 17.14 | 5 | 35 | 26 | 35 | 18 | 15 | 15 | 7 | 7 | 6 | 7 | 4.5 | |
| 37 | 1st and 2d Class Pipemen and Truckmen..... | Dec. 3 | 42 | 10 | 23.81 | 9 | 42 | 26 | 42 | 15 | 13 | 13 | 12 | 12 | 10 | 11 | 3 | 6.5 |
| 38 | 3d and 4th Class Pipemen and Truckmen..... | Dec. 4 | 32 | 24 | 75 | 24 | 32 | 29 | 32 | 25 | 24 | 24 | 24 | 24 | 2 | 0 | 6.7 | |
| 39 | Ass't. Engineers (Fire Department)..... | Dec. 4 | 29 | 8 | 27.59 | 6 | 29 | 27 | 29 | 14 | 12 | 12 | 11 | 11 | 8 | 11 | 0 | 4.13 |
| 43 | Drivers (Fire Dep't.)..... | Dec. 24 | 10 | 6 | 60 | 5 | 10 | 6 | 10 | 9 | 6 | 6 | 6 | 6 | 6 | 2 | 0 | 1.33 |
| Totals..... | | | 188 | 81 | 43.09 | 76 | 188 | 145 | 188 | 114 | 98 | 98 | 87 | 87 | 81 | | | |

TABLE VII.—CERTIFICATIONS FOR EMPLOYMENT.

| OFFICIAL SERVICE.—(ENTRANCE.) | | | OFFICIAL SERVICE.—(ENTRANCE.) | | | OFFICIAL SERVICE.—(PROMOTION.) | | | LABOR SERVICE. | | | | | |
|-----------------------------------|-----|-------------------|-------------------------------|---------------------------|----|--------------------------------|------|------------------------------|----------------|-----------------|--------------------------|-------------------|------|---------------|
| KIND OF EXAMINATION. | | Number Certified. | | KIND OF EXAMINATION. | | Number Certified. | | KIND OF EXAMINATION. | | CLASS OF LABOR. | | Number Certified. | | |
| | | 1895 | 1896 | | | Total | 1895 | | | 1896 | Total | 1895 | 1896 | Total |
| Bacteriologists (Ass't.)... | 1 | 1 | | (Brought forward)..... | | | | Clerks (Grades 1 and 2)..... | 1 | 1 | Blacksmiths..... | 3 | 3 | |
| Chemists (Ass't.)..... | 1 | 1 | | Inspectors: | | | | “ (Grade 3)..... | 2 | 2 | Carpenters..... | 12 | 12 | |
| (a) Clerks..... | 1 | 15 | | Paving..... | 1 | 1 | | (Police Dept.)..... | 1 | 1 | Coal Passers..... | 4 | 4 | |
| Drivers (Fire)..... | 8 | 32 | | Tenement..... | 2 | 29 | | Engineers (Mechanical).... | 3 | 3 | (a) Cribmen..... | 18 | 18 | |
| “ (Police)..... | 3 | 3 | | Ward and Street..... | 6 | 6 | | Fire Department: | | | Firemen..... | 18 | 18 | |
| Elevator Men..... | 5 | 5 | | Janitors..... | 8 | 8 | | (a) Captains (2d Class).... | 3 | 3 | Hydrant and Meter Re- | 5 | 5 | |
| Engineers, Ass't. (Civil)... | 4 | 4 | | Janitresses..... | 4 | 4 | | “ (1st Class)..... | 2 | 2 | pairers and Tappers..... | 5 | 5 | |
| “ (Fire)..... | 4 | 4 | | Lamp Trimmers..... | 6 | 6 | | (a) Drivers..... | 5 | 5 | Laborers: | | | |
| Fumigators..... | 13 | 21 | | Library..... | 2 | 2 | | Engineers' (Asst.)..... | 6 | 6 | Police Dept..... | 2 | 2 | |
| Guards, House of Correc- | 10 | 22 | | Linen..... | 12 | 12 | | Lieutenants..... | 10 | 10 | Street..... | 68 | 466 | |
| tion..... | 2 | 2 | | (a) Matrons (Police)..... | 1 | 2 | | Operators (Asst.)..... | 1 | 1 | Sewer..... | 61 | 61 | |
| Inspectors: | | | | Messengers..... | 1 | 4 | | (a) Pipemen & Truckmen, | | | Water..... | 89 | 89 | |
| Mason..... | 11 | 11 | | Milk Testers..... | 3 | 9 | | 1st and 2d Class..... | 14 | 14 | Masous..... | 4 | 4 | |
| Material..... | 1 | 1 | | Operators (Telephone).... | 50 | 374 | | (a) Pipemen & Truckmen, | 51 | 51 | Machinists..... | 9 | 9 | |
| Meat..... | 2 | 2 | | Patrolmen..... | 29 | 35 | | 3d and 4th Class..... | | | Oilers..... | 9 | 9 | |
| Mining..... | 2 | 2 | | (a) Pipemen and Truckmen. | 11 | 11 | | | | | Painters..... | 7 | 7 | |
| (a) Milk..... | 2 | 2 | | Rodmen..... | 1 | 6 | | | | | Pavers..... | 16 | 16 | |
| Medical..... | 6 | 6 | | Stenographers..... | 2 | 7 | | | | | Plumbers..... | 2 | 2 | |
| Totals..... | 111 | 568 | 679 | Watchmen..... | 2 | 2 | | | | | Water Boys..... | 4 | 4 | |
| | | | | | | | 8 | 99 | 107 | | | | | |
| Grand Totals (Official and Labor) | | | | | | | | | | | | 68 | 797 | 187 1396 1583 |

APPENDIX D.

Civil Service Commission—Financial Statement

For the Year ending December 31, 1896.

SALARIES.

| | | | | |
|---------------------------|---|---|-------------|-------------|
| Commission and Secretary, | - | - | \$12,000 00 | |
| Examiners and Clerks, | - | - | 14,425 90 | \$26,425 90 |

MISCELLANEOUS.

| | | | | | |
|---------------------------------|---|---|---|-----------|--------------------|
| Office furniture, | - | - | - | \$ 353 63 | |
| Stationery and office supplies, | - | - | - | 644 34 | |
| Postage, | - | - | - | 804 69 | |
| Incidentals, | - | - | - | 307 52 | |
| Printing, | - | - | - | 1,310 35 | |
| Advertising, | - | - | - | 70 14 | |
| Blank books, | - | - | - | 279 93 | |
| Telephone, | - | - | - | 135 00 | |
| Investigations, | - | - | - | 599 19 | 4,504 79 |
| | | | | | <u>\$30,930 69</u> |

APPENDIX E.

CIVIL SERVICE ACT.

AN ACT TO REGULATE THE CIVIL SERVICE OF CITIES.

APPROVED MARCH 20, 1895.

SECTION 1. Be it enacted by the People of the State of Illinois, represented in the General Assembly: **Commissioners Appointed—Oath.** The mayor of each city in this state which shall adopt this act as hereinafter provided, shall, not less than forty nor more than ninety days after the taking effect of this act in such city, appoint three persons, who shall constitute and be known as the Civil Service Commissioners of such city, one for three years, one for two years, and one for one year from the time of appointment and until their respective successors are appointed and qualified; and in every year thereafter the mayor shall, in like manner, appoint one person as the successor of the commissioner whose term shall expire in that year to serve as such commissioner for three years and until his successor is appointed and qualified. Two commissioners shall constitute a quorum. All appointments to said Commission, both original and to fill vacancies, shall be so made that not more than two members shall, at the time of appointment, be members of the same political party. Said commissioners shall hold no other lucrative office or employment under the United States, the State of Illinois, or any municipal corporation or political division thereof. Each commissioner, before entering upon the duties of his office, shall take the oath prescribed by the Constitution of this State.

SEC. 2. **Removal of Commissioners—Vacancy.** The mayor may, in his discretion, remove any commissioner for incompetence,

neglect of duty or malfeasance in office. The mayor shall within ten days report in writing any such removal to the city council, with his reasons therefor. Any vacancy in the office of commissioner shall be filled by appointment by the mayor.

SEC. 3. Classification. Said commissioners shall classify all the offices and places of employment in such city, with reference to the examinations hereinafter provided for, except those offices and places mentioned in Section eleven of this act. The offices and places so classified by the Commission shall constitute the classified civil service of such city; and no appointments to any of such offices or places shall be made except under and according to the rules hereinafter mentioned.

SEC. 4. Rules. Said Commission shall make rules to carry out the purposes of this act, and for examinations, appointments and removals in accordance with its provisions, and the Commission may, from time to time, make changes in the original rules.

SEC. 5. Publication of Rules. Time of Taking Effect. All rules made as hereinbefore provided, and all changes therein, shall forthwith be printed for distribution by said Commission; and the Commission shall give notice of the place or places where said rules may be obtained by publication in one or more daily newspapers, published in such city, and in each such publication shall be specified the date, not less than ten days subsequent to the date of such publication, when said rules shall go into operation.

SEC. 6. Examinations. All applicants for offices or places in said classified service, except those mentioned in section eleven, shall be subjected to examination, which shall be public, competitive and free to all citizens of the United States, with specified limitations as to residence, age, health, habits and moral character. Such examinations shall be practical in their character, and shall relate to those matters which will fairly test the relative capacity of the persons examined to discharge the duties of the positions to which they seek to be appointed, and shall include tests of physical qualifications and health, and when appropriate, of manual skill. No questions in any examination shall relate to political or religious opinions or affiliations. The Commission shall control all examinations, and may, whenever an examination is to take place designate a suitable number of persons, either in or not in the official service of the city, to be examiners, and it shall be the duty of such

examiners, and, if in the official service, it shall be a part of their official duty, without extra compensation, to conduct such examination as the Commission may direct, and to make return or report thereof to said Commission, and the Commission may at any time substitute any other person, whether or not in such service, in the place of any one so selected; and the Commission may themselves at any time act as such examiners, and without appointing examiners. The examiners at any examination shall not all be members of the same political party.

SEC. 7. Notice of Examinations. Notice of the time and place and general scope of every examination shall be given by the Commission by publication for two weeks preceding such examination in a daily newspaper of general circulation published in such city, and such notice shall also be posted by said Commission in a conspicuous place in their office for two weeks before such examination. Such further notice of examinations may be given as the Commission shall prescribe.

SEC. 8. Registers. From the returns or reports of the examiners, or from the examinations made by the Commission, the Commission shall prepare a register for each grade or class of positions in the classified service of such city of the persons whose general average standing upon examination for such grade or class is not less than the minimum fixed by the rules of such Commission, and who are otherwise eligible; and such persons shall take rank upon the register as candidates in the order of their relative excellence as determined by examination, without reference to priority of time of examination.

SEC. 9. Promotions. The Commission shall, by its rules, provide for promotions in such classified service, on the basis of ascertained merit and seniority in service and examination, and shall provide, in all cases where it is practicable, that vacancies shall be filled by promotion. All examinations for promotion shall be competitive among such members of the next lower rank as desire to submit themselves to such examinations; and it shall be the duty of the Commission to submit to the appointing power the names of not more than three applicants for each promotion having the highest rating. The method of examination, and the rules governing the same and the method of certifying, shall be the same as provided for applicants for original appointment.

SEC. 10. Appointments to Classified Service. The head of the department or office in which a position classified under this act is to be filled shall notify said Commission of that fact, and said Commission shall certify to the appointing officer the name and address of the candidate standing highest upon the register for the class or grade to which said position belongs, except that, in cases of laborers where a choice by competition is impracticable, said Commission may provide by its rules that the selections shall be made by lot from among those candidates proved fit by examination. In making such certification sex shall be disregarded, except when some statute, the rules of said Commission or the appointing power specifies sex. The appointing officer shall notify said Commission of each position to be filled separately, and shall fill such place by the appointment of the person certified to him by said Commission therefor, which appointment shall be on probation for a period to be fixed by said rules. Said Commission may strike off names of candidates from the register after they have remained thereon more than two years. At or before the expiration of the period of probation the head of the department or office in which a candidate is employed may, by and with the consent of said Commission, discharge him upon assigning in writing his reason therefor to said Commission. If he is not then discharged his appointment shall be deemed complete. To prevent the stoppage of public business, or to meet extraordinary exigencies, the head of any department or office may, with the approval of the Commission, make temporary appointment to remain in force not exceeding sixty days, and only until regular appointments under the provisions of this act can be made.

SEC. 11. Officers Excepted from Classified Service. Officers who are elected by the people, or who are elected by the city council pursuant to the city charter, or whose appointment is subject to confirmation by the city council, judges and clerks of election, members of any Board of Education, the superintendent and teachers of schools, heads of any principal department of the city, members of the law department, and one private secretary of the mayor, shall not be included in such classified service.

SEC. 12. Removals. No officer or employe in the classified civil service of any city who shall have been appointed under said rules and after said examination, shall be removed or discharged except for cause, upon written charges and after an opportunity to

be heard in his own defense. Such charges shall be investigated by or before said Civil Service Commission, or by or before some officer or board appointed by said Commission, to conduct such investigation. The finding and decision of such Commission or investigating officer or board, when approved by said Commission, shall be certified to the appointing officer, and shall be forthwith enforced by such officer. Nothing in this act shall limit the power of any officer to suspend a subordinate for a reasonable period, not exceeding thirty days. In the course of an investigation of charges each member of the Commission, and of any board so appointed by it, and any officer so appointed shall have the power to administer oaths and shall have power to secure by its subpoena both the attendance and testimony of witnesses, and the production of books and papers relevant to such investigation. Nothing in this section shall be construed to require such charges or investigation in cases of laborers or persons having the custody of public money, for the safe keeping of which another person has given bonds.

SEC. 13. Reports to Commission. Immediate notice in writing shall be given by the appointing power, to said commission, and all appointments, permanent or temporary, made in such classified civil service, and all transfers, promotions, resignations, or vacancies from any cause in such service, and of the date thereof; and a record of the same shall be kept by said Commission. When any office or place of employment is created or abolished, or the compensation attached thereto altered, the officer or board making such change shall immediately report it in writing to said Commission.

SEC. 14. Investigations. The Commission shall investigate the enforcement of this act and of its rules, and the action of the examiners herein provided for, and the conduct and action of the appointees in the classified service in its city, and may enquire as to the nature, tenure and compensation of all offices and places in the public service thereof. In the course of such investigations each commissioner shall have power to administer oaths, and said Commission shall have power to secure by its subpoena both the attendance and testimony of witnesses and the production of books and papers relevant to such investigation.

SEC. 15. Report by Commission. Said Commission shall, on or before the fifteenth day of January of each year, make to the mayor for transmission to the city council a report showing its own

action, the rules in force, the practical effects thereof, and any suggestions it may approve for the more effectual accomplishment of the purposes of this act. The mayor may require a report from said Commission at any other time.

SEC. 16. Chief Examiner. Said Commission shall employ a chief examiner, whose duty it shall be, under the direction of the Commission, to superintend any examination held in such city under this act, and who shall perform such other duties as the Commission shall prescribe. The chief examiner shall be *ex officio* secretary of said Commission, under the direction of such Commission; he, as such secretary, shall keep the minutes of its proceedings, preserve all reports made to it, keep a record of all examinations held under its direction, and perform such other duties as the Commission shall prescribe.

SEC. 17. Officers to Aid—Rooms. All officers of any city which shall have adopted this act shall aid said Commission in all proper ways in carrying out the provisions of this act, and at any place where examinations are to be held shall allow reasonable use of public buildings for holding such examinations. The mayor of such city shall cause suitable rooms to be provided for said Commission at the expense of such city.

SEC. 18. Salaries and Expenses. In cities having a population of one hundred thousand inhabitants, or more, each of said commissioners shall receive a salary of three thousand dollars a year; the chief examiner shall receive a salary of three thousand dollars a year. Any person not at the time in the official service of the city, serving as a member of the Board of Examiners or of a trial board, shall receive compensation for every day actually and necessarily spent in the discharge of his duty as an examiner or a member of the trial board, at the rate of five dollars per day, and said Commission may, in such city, also incur expenses not exceeding five thousand dollars per year, for clerk hire, printing, stationery and other incidental matters.

In cities having a population of fifty thousand inhabitants and less than one hundred thousand such commissioners shall receive an annual salary of one thousand five hundred dollars each; the chief examiner shall receive an annual salary of one thousand five hundred dollars. Any person not at the time in the official service of the city, serving as a member of the Board of Examiners, or of

a trial board, shall receive compensation for every day actually and necessarily spent in the discharge of his duty as an examiner or member of the trial board, at the rate of three dollars per day, and said Commission may, in such city, also incur expenses not exceeding three thousand dollars a year, for clerk hire, printing, stationery, and other incidental matters.

In cities having a population of twenty-five thousand and less than fifty thousand inhabitants, such commissioners shall receive an annual salary of one thousand dollars each, and the chief examiner shall receive an annual salary of one thousand dollars.

In cities having a population of less than twenty-five thousand inhabitants, such commissioners shall receive an annual salary to be fixed by the city council of such cities not to exceed five hundred dollars each; the chief examiner shall receive an annual salary to be fixed by the City Council of such cities not to exceed five hundred dollars. In cities having a population of less than fifty thousand inhabitants any person, not at the time in the official service of the city, serving as a member of the Board of Examiners, or of a trial board, shall receive compensation for every day actually and necessarily spent in the discharge of his duty as an examiner or member of the trial board, at the rate of two dollars per day, and said Commission may, in such city, also incur expenses not exceeding two thousand dollars per year, for clerk hire, printing, stationery and other incidental matters.

SEC. 19. Appropriations. A sufficient sum of money shall be appropriated each year by each city which shall adopt this act, to carry out the provisions of this act in such city. In such cities as shall have already made the annual appropriation for municipal purposes for the current fiscal year, the mayor is authorized and required to pay the salaries and expenses as herein provided for such fiscal year out of the moneys appropriated for contingent purposes by such municipality, or out of any moneys not otherwise appropriated.

SEC. 20. Frauds Prohibited. No person or officer shall wilfully or corruptly by himself or in co-operation with one or more other persons, defeat, deceive or obstruct any person in respect to his or her right of examination, or corruptly or falsely mark, grade, estimate or report upon the examination or proper standing of any person examined hereunder or aid in so doing, or wilfully or corruptly make any false representation concerning the same, or con-

cerning the person examined, or wilfully or corruptly furnish to any person any special or secret information for the purpose of either improving or injuring the prospects or chances of any person so examined or to be examined, being appointed, employed or promoted.

SEC. 21. No Officer to Solicit or Receive Political Contributions. No officer or employe of such city shall solicit, orally or by letter, or receive or pay, or be in any manner concerned in soliciting, receiving or paying, any assessment, subscription or contribution for any party or political purpose whatever.

SEC. 22. No Person to Solicit Political Contributions from Officers or Employes. No person shall solicit, orally or by letter, or be in any manner concerned in soliciting any assessment, contribution or payment, for any party or any political purpose whatever, from any officer or employe in any department of the city government of any city which shall adopt this act.

SEC. 23. Assessments and Contributions in Public Offices Forbidden. No person shall in any room or building occupied for the discharge of official duties by any officer or employe in any city, which shall adopt this act, solicit, orally or by written communication, delivered therein, or in any other manner, or receive any contribution of money or other thing of value, for any party or political purpose whatever. No officer, agent, clerk or employe under the government of such city, who may have charge or control of any building, office or room, occupied for any purpose of said government, shall permit any person to enter the same for the purpose of therein soliciting or delivering written solicitations for receiving or giving notice of any political assessments.

SEC. 24. Payments of Political Assessments to Public Officers Prohibited. No officer or employe in the service of such city shall, directly or indirectly, give or hand over to any officer or employe in said service, or to any senator or representative or alderman, councilman or commissioner, any money or other valuable thing, on account of or to be applied to the promotion of any party or political object whatever.

SEC. 25. Abuse of Official Influence Prohibited. No officer or employe of such city shall discharge or degrade or promote, or in any manner change the official rank or compensation of any other

officer or employe, or promise or threaten to do so for giving or withholding or neglecting to make any contribution of money or other valuable thing for any party or political purpose, or for refusal or neglect to render any party or political service.

SEC. 26. Payment for Places Prohibited. No applicant for appointment in said classified civil service, either directly or indirectly, shall pay, or promise to pay any money or other valuable thing to any person whatever for or on account of his appointment, or proposed appointment and no officer or employe shall pay or promise to pay, either directly or indirectly, any person any money or other valuable thing whatever for or on account of his promotion.

SEC. 27. Recommendations in Consideration of Political Service Prohibited. No applicant for appointment or promotion in said classified civil service shall ask for or receive a recommendation or assistance from any officer or employe in said service, or of any person upon the consideration of any political service to be rendered to or for such person or for the promotion of such person to any office of appointment.

SEC. 28. Abuse of Political Influence Prohibited. No person while holding any office in the government of such city, or in nomination for, or while seeking a nomination for, or appointment to any such office, shall corruptly use or promise to use, either directly or indirectly, any official authority or influence (whether then possessed or merely anticipated) in the way of conferring upon any person, or in order to secure or aid any person in securing any office or public employment, or any nomination, confirmation, promotion or increase of salary upon the consideration or condition that the vote or political influence or action of the last named person or any other shall be given or used in behalf of any candidate, officer or party, or upon any other corrupt condition or consideration.

SEC. 29. Auditing Officer. No accounting or auditing officer shall allow the claim of any public officer for services of any deputy or other person employed in the public service in violation of the provisions of this act.

SEC. 30. Appointments and Removals to be Certified to the Comptroller. The Commission shall certify to the comptroller or other auditing officers, all appointments to offices and places in

the classified civil service, and all vacancies occurring therein, whether by dismissal or resignation or death, and all findings made or approved by the Commission under the provisions of section twelve of this act, that a person shall be discharged from the classified civil service.

SEC. 31. Comptroller to Pay Salaries only after Certification. No comptroller or other auditing officer of a city which has adopted this act shall approve the payment of, or be in any manner concerned in paying any salary or wages to any person for services as an officer or employe of such city, unless such person is occupying an office or place of employment according to the provisions of law and is entitled to payment therefor.

SEC. 32. Paymasters, Etc., to Pay Salaries only after Certification. No paymaster, treasurer, or other officer or agent of a city which has adopted this act shall wilfully pay, or be in any manner concerned in paying any person any salary or wages for services as an officer or employe of such city, unless such person is occupying an office or place of employment according to the provisions of law and is entitled to payment therefor.

SEC. 33. Compelling Testimony of Witnesses. Production of Books and Papers. Any person who shall be served with a subpoena to appear and testify, or to produce books and papers, issued by the Commission or by any commissioner or by any board or person acting under the orders of the Commission in the course of an investigation conducted either under the provisions of section twelve or section fourteen of this act, and who shall refuse or neglect to appear or to testify, or to produce books and papers relevant to said investigation, as commanded in such subpoena, shall be guilty of a misdemeanor, and shall on conviction, be punished as provided in section thirty-four of this act. The fees of witnesses for attendance and travel shall be the same as the fees of witnesses before the circuit courts of this state, and shall be paid from the appropriation for the expenses of the Commission. Any circuit court of this state, or any judge thereof, either in term time or vacation, upon application of any such commissioner, or officer or board, may in his discretion compel the attendance of witnesses, the production of books and papers, and giving of testimony before the Commission, or before any such commissioner, investigating board or officer, by attachment for contempt or otherwise, in the

same manner as the production of evidence may be compelled before said court. Every person who, having taken an oath or made affirmation before a commissioner or officer appointed by the Commission authorized to administer oaths shall swear or affirm wilfully, corruptly and falsely shall be guilty of perjury, and upon conviction shall be punished accordingly.

SEC. 34. Penalties. Any person who shall wilfully, or through culpable negligence violate any of the provisions of this act, or any rule promulgated in accordance with the provisions thereof, shall be guilty of a misdemeanor, and shall, on conviction thereof, be punished by a fine of not less than fifty dollars and not exceeding one thousand dollars, or by imprisonment in the county jail for a term not exceeding six months, or both such fine and imprisonment in the discretion of the court.

SEC. 35. Penalties—Disqualification to Hold Office. If any person shall be convicted under the next preceding section, any public office or place of public employment, which such person may hold shall, by force of such conviction, be rendered vacant, and such person shall be incapable of holding any office or place of public employment for the period of five years from the date of such conviction.

SEC. 36. What Officers to Prosecute. Prosecutions for violations of this act may be instituted either by the Attorney General, State's Attorney for the county in which the offence is alleged to have been committed, or by the Commission, acting through special counsel. Such suits shall be conducted and controlled by the prosecuting officers who institute them, unless they request the aid of other prosecuting officers.

SEC. 37. Repeal. All laws or parts of laws which are inconsistent with this act, or any of the provisions thereof, are hereby repealed.

SEC. 38. Adoption. The electors of any city now existing or hereafter existing in this State, may adopt and become entitled to the benefit of this act in the following manner: Whenever one thousand of the legal voters of such city, voting at the last preceding election shall petition the judge of the county court of the county, in which such city is located, to submit to a vote of the electors of such city the proposition as to whether such city and

the electors thereof shall adopt and become entitled to the benefits of this act, it shall be the duty of such county court to submit such proposition accordingly at the the next succeeding general state, county or city election, and if such proposition is not adopted at such election the same shall in a like manner be submitted to a vote of the electors of such city by such county court upon like application at any general state, county or city election, thereafter, and an order shall be entered of record in such county court submitting such proposition as aforesaid.

If one thousand shall exceed one-eighth of the legal voters of any such city voting at the last preceding election, then such petition or application need not be signed or made by more than one-eighth of the legal voters of such city voting at the last preceding election.

SEC. 39. Notice of Election. The judge of such county court shall give at least ten days notice of the election at which such proposition is to be submitted by publishing such notice in one or more newspapers published within such city for at least five times, the first publication to be at least ten days before the day of the election; and if no newspaper is published in such city, then by posting at least five copies of such notice in each ward at least ten days before such election. Such election shall be held under the election law in force in such city, except as herein otherwise provided. The proposition so to be voted for shall appear in plain, prominent type at head of every ticket and preceding the names of persons to be voted upon for any office at such election. If a majority of the votes cast upon such proposition shall be for such proposition, this act shall thereby be adopted by such city, and the mayor shall thereupon issue a proclamation declaring this act in force in such city.

SEC. 40. Emergency. Whereas, an emergency exists for the immediate taking effect of this act, therefore it shall be in force from and after its passage.

APPENDIX F.

PROCLAMATION BY THE MAYOR.

Whereas, Under the provisions of an Act of the General Assembly of the State of Illinois, entitled "An Act to Regulate the Civil Service of Cities," approved and in force March 20th, 1895, there was duly submitted to a vote of the electors of the City of Chicago at the general city election held April 2nd, 1895, the proposition whether said city and its electors should adopt and become entitled to the benefits of said act; and

Whereas, A large majority of the votes cast at such election were cast for such proposition, and in favor of the adoption of said act; now, therefore, as required by said act, I, George B. Swift, Mayor of the City of Chicago, hereby declare that said act is in full force and effect in the City of Chicago from and after this date, and that in accordance with the provisions thereof, I have this day appointed as the three Civil Service Commissioners, under said act, John M. Clark, for the term of three years; Robert A. Waller, for a term of two years; and Christoph Hotz,* for a term of one year.

Dated July 1st, 1895.

GEORGE B. SWIFT, Mayor.

* June 29, 1896, Christoph Hotz was appointed by the Mayor to succeed himself, as Commissioner, for the term of three years, from July 1st, 1896.

APPENDIX G.

CIVIL SERVICE RULES.

In accordance with the provisions of an act entitled "An Act to Regulate the Civil Service of Cities," approved March 20, 1895, the Civil Service Commission of the City of Chicago, created under said act, hereby adopts and publishes the following rules for the purpose of carrying out the provisions of said act, for the classification of the public service and for the government of examinations, appointments, promotions and removals of all persons in the service of the City of Chicago, coming under the provisions of said act.

RULE I.

CLASSIFICATION.

1. **Unclassified Service.** Section eleven of said act provides that the following offices and places of employment shall not be included in the Classified Service:—

"Officers who are elected by the people, or who are elected by the City Council pursuant to the City Charter, or whose appointment is subject to confirmation by the City Council, judges and clerks of election, members of any Board of Education, the Superintendent and Teachers of Schools, heads of any principal department of the City, members of the law department, and one private secretary of the Mayor."

The offices and places above named shall constitute the Unclassified Service.

2. **Classified Service.** All other offices and places of employment in said city, under the provisions of said act, whether permanent, temporary or substitute, shall constitute the Classified Service. With reference to the examinations hereinafter provided for, they are hereby classified under two general classes, to be known as Class

A and Class B respectively. This classification is based mainly upon nature of employment. The positions embraced in Class A will be chiefly those of a permanent character, while those in Class B will be more in the nature of temporary employments. The Commission will decide as occasion may require in which class and division any particular office or place of employment shall belong.

3. **Official and Labor Service.** Class A shall be known as the Official Service, and Class B as the Labor Service.

4. **Divisions and Grades.** For convenience in designation, in carrying on examinations, certifying for appointments and promotions, and in making removals, the Official Service shall be divided into divisions, based upon the character of the service to be performed, and each division shall be divided into grades, based upon the amount of compensation.

The several divisions of the Official Service shall be as follows:—

Division A: **MEDICAL SERVICE.**—All positions, the duties of which require knowledge of the profession of medicine, or some branch thereof.

Division B: **CIVIL ENGINEERING.**—All positions, the duties of which require knowledge of the profession of civil engineering, or some branch thereof.

Division C: **CLERICAL SERVICE.**—All positions of clerks and other persons of whatever designation, rendering service as copyists, recorders, book-keepers, stenographers, pages, messengers, or any clerical, recording or similar service, whether paid by time for work done, or by the piece, or in any other way.

Division D: **POLICE SERVICE.**—All positions in the uniformed police force.

Division E: **ELECTRICAL SERVICE.**—All positions, the duties of which require special knowledge of electricity, in some form of its application.

Division F: **FIRE SERVICE.**—All members of the uniformed force of the Fire Department.

Division G: **MECHANICAL ENGINEERS.**—All positions requiring on the part of those filling them, a knowledge of steam engines, boilers, and other machinery, their care and operation.

Division H: **BRIDGE SERVICE.**—All positions of a permanent character connected with the care and operation of bridges.

Division I: **INSPECTION SERVICE.**—All positions under control of the Department of Public Works, the duties of which relate

to inspection, whether of work done, material furnished, or other matters.

Division J : JANITOR AND ELEVATOR SERVICE.—All positions of a permanent character connected with the care and operation of buildings.

Division K : LIBRARY SERVICE.—All positions of a permanent character connected with the administration of public libraries.

Division L : MISCELLANEOUS SERVICE.—All the offices and places of employment, coming under the provisions of said act, whatever the character and designation of the same may be, which are not included in any of the foregoing divisions of the Official Service, nor in the Labor Service, nor in the Unclassified Service.

The grades shall be uniform in all the divisions and based upon compensation as follows :—

All positions, the compensation of which is at the rate of less than \$800 per annum, shall be in the first grade.

All positions, the compensation of which is at the rate of \$800 per annum, or more, and less than \$1,000, shall be in the second grade.

All positions, the compensation of which is at the rate of \$1,000 per annum, or more, and less than \$1,200, shall be in the third grade.

All positions, the compensation of which is at the rate of \$1,200 per annum, or more, and less than \$1,400, shall be in the fourth grade.

All positions, the compensation of which is at the rate of \$1,400 per annum, or more, and less than \$1,600, shall be in the fifth grade.

All positions, the compensation of which is at the rate of \$1,600 per annum, or more, and less than \$1,800, shall be in the sixth grade.

All positions, the compensation of which is at the rate of \$1,800 per annum, or more, and less than \$2,100, shall be in the seventh grade.

All positions, the compensation of which is at the rate of \$2,100 per annum, or more, and less than \$2,500, shall be in the eighth grade.

All positions, the compensation of which is at the rate of \$2,500 per annum, or more, and less than \$3,000, shall be in the ninth grade.

All positions, the compensation of which is at the rate of \$3,000 per annum, or over that amount, shall be in the tenth grade.

5. **Grouping of Grades.** Any two or more of the grades herein established in any division may be grouped together and treated as one grade for the purpose of facilitating examinations for original entrance to the service or for promotion therein. Such action shall be taken only by a vote in the affirmative of all three commissioners, and a record thereof shall be made in the minutes of the proceedings of the Commission. Action so taken shall remain in force until rescinded or amended at some subsequent meeting of the Commission by vote of all three commissioners, and record of the same shall be made in the proceedings of the Commission.

6. **System of Rank.** In Divisions "D" and "F" (Police and Fire Departments), the rank and official designation, as established by ordinance or usage, may be recognized, and when promotions from rank to rank are not in conformity with the grading as herein established, the Commission may base examinations for promotion upon the system of rank as existing, or as may be established by law in those two divisions.

CLASS A. OFFICIAL SERVICE.

RULE II.

CITIZENSHIP, RESIDENCE AND AGE OF APPLICANTS.

1. **Citizenship and Residence.** No person shall be admitted to examination for any position in the Official Service who is not a citizen of the United States, and who has not been an actual resident of the City of Chicago for at least one year next preceding the date of examination.

2. **Age.** Unless otherwise provided in these rules, no person will be admitted to examination for a position in the Official Service who is less than twenty years of age at the date of the examination, except that applicants for positions of pages and messengers must not be less than seventeen years of age at the date of examination.

3. **Waiver of Residence in Special Examinations.** In special examinations for any place requiring technical, professional, or scientific knowledge, or manual skill of a high order, the Commission may waive the requirement of residence in the City of Chicago, fixed in section one of this rule.

RULE III.

APPLICATION.

1. **Application, How Made.** Application for admission to examination shall be made on blanks in such form and manner and supported by such certificates of persons acquainted with the applicant, as the Commission may prescribe. These blanks will be furnished directly to applicants for examination.

2. **Character and Fitness of Applicants.** Every applicant must be of good moral character, of temperate habits, of sound health, and must be physically able to perform the duties of the position applied for.

3. **Moral Character.** A good moral character is an essential qualification, and is of paramount importance in determining an applicant's right to examination.

4. **Burden of Proof.** The burden of proof of good character shall in all cases be upon the applicant, who may be required to furnish evidence thereof, additional to the certificates required in the application.

5. **Failure to Prove Good Character.** Failure by the applicant to prove good character to the satisfaction of the Commission shall exclude said applicant from examination. Proof at any time produced to the Commission of the bad character or dissolute habits of an applicant or eligible, of any criminal or disgraceful act committed by him, or of dismissal for good cause from the public service, shall be deemed sufficient cause to exclude said applicant from examination, or for removal from a register of eligibles after examination.

6. **Effect of False Statements.** A false statement knowingly made by any person in an application for examination, connivance at any false statement made in any certificate which may accompany such application, or complicity in any fraud touching the same, shall be regarded as good cause for exclusion from the register of eligibles, or for removal or discharge during probation, or thereafter; but no person shall be removed from a register of eligibles, or from the service, under this section, until an opportunity has been given him to be heard by the Commission. A record shall be kept of the finding of the Commission, showing the vote thereon, and the reason therefor.

7. **Defective Applications Returned.** A defective application will be returned to the applicant with a notice to amend the same; but not more than two opportunities for amendment need be given. Whenever the application shows that the applicant is not qualified for examination under these rules, the applicant will be notified of the same, and of the reason therefor.

8. **Applications Not to be Returned.** Applications and accompanying certificates not returned for correction will remain on file in the office of the Commission, and under no circumstances be returned to applicants.

9. **Limited Numbers to be Examined.** The Commission may limit the number of applications to be received for any examination or restrict the number to be examined, according to the needs of the service; but in all such cases applicants shall be admitted to examination in the order in which their applications have been filed in due form.

RULE IV.

EXAMINATION.

1. **Character of Examinations.** All examinations shall be absolutely impartial, practical in their character, and shall have paramount regard to matters which will fairly test the relative capacity and fitness of the persons examined for the service which they seek to enter.

2. **Political or Religious Opinions Not to Influence Appointments.** No question in any examination shall relate to political or religious opinions or affiliations, and no appointment or selection to an office, or for employment within the scope of these rules, shall be in any manner affected or influenced by such opinions or affiliations.

3. **Place, Time and Notice of Examinations.** Examinations shall be held at such times and places as the Commission may designate, and two weeks' notice thereof shall be given, as provided by law.

4. **Subjects of Examination.** The subjects of examination shall be designated from time to time by the Commission, and shall be such as the needs of the service require and such as tend to prove the qualifications of the applicant for the office sought, and

may include special tests of fitness for any particular place requiring technical, professional, or scientific knowledge, or manual skill.

5. **How Graded.** Proficiency in any subject shall be credited in grading the standing of the person examined, in proportion to the value of a knowledge of such subject in the branch or part of the service which the applicant seeks to enter, and of physical qualifications and health. The relative weight of each subject shall be fixed by the Commission for every examination.

6. **Must Obtain Seventy Per Cent.** The name of no person shall be entered on a register of eligibles whose standing, upon a just grading in the examination, shall average less than seventy per centum of complete proficiency in the subjects of the examination, taken as a whole, and of such minimum mark as may be fixed by the Commission for any part thereof.

7. **Physical Examinations.** The Commission will provide for examinations to determine the physical qualifications and health of all applicants. Such examinations shall be made by physicians in the service of the city, unless the Commission shall appoint other physicians or competent experts for the purpose. The result of such examinations shall be certified on blanks furnished by the Commission.

8. **Method of Examination, and Marking.** All questions used in any examination shall be first approved by the Commission. All examinations shall be conducted under the supervision of, and examination papers shall be marked under the regulation of the Commission. The same series of examination papers shall not be used a second time.

9. **Boards of Examiners.** For the purpose of preparing and marking examination papers for original entrance to the Official Service, there shall be a general Board of Examiners, to consist of not less than three persons. Such board shall be composed of persons in the public service, who shall be detailed for duty at the office of the Commission, or of such other persons not in the public service as the Commission may from time to time designate. Under supervision of the Commission, the general board shall prepare and mark the papers of such examinations as the Commission shall direct. There may also be such special Boards of Examiners, and such auxiliary members of the general board, for the preparation

of questions and marking of candidates in technical subjects as the Commission may from time to time designate. The members of each of such boards shall not all be of the same political party. The Commission will designate the chairman and secretary of each of such boards, and make such change in the membership from time to time as it may deem proper. Each board shall keep such records and make such reports as the Commission may require. Such records shall be open to the inspection of any member of the Commission and of the Chief Examiner.

10. **Notice of Standing.** Each applicant will be notified of the general average he has obtained on examination.

11. **Re-examination.** No person who has failed to pass an examination shall be re-examined within six months from the date of such failure. An applicant who has passed an examination and been enrolled upon a register of eligibles, shall not be again examined for the same branch of the service until one year from the date of such enrollment and then only upon withdrawing his name from the register of eligibles and filing a new application.

RULE V.

REGISTERS OF ELIGIBLES.

1. **Method of Enrollment.** All competitors who attain a general average of seventy per centum or over (and of such minimum mark as may be fixed by the Commission for any part thereof), shall be eligible for appointment to the place for which they were examined, and their names shall be enrolled in the order of general average upon the proper registers, which shall be in such form as the Commission shall prescribe, and shall be called "Registers of Eligibles."

2. **Order of Standing.** Priority of date of examination will give no advantage in position on the registers of eligibles.

3. **Time of Remaining on Registers of Eligibles.** Names shall remain upon the registers of eligibles for two years from the date of their enrollment, unless sooner removed under authority contained in these rules or by appointment. At the expiration of one year the eligible shall, upon a form prescribed by the Commission, furnish new certificates of character.

4. **Temporary Appointment in Labor Service.** Any person whose name is on a register of eligibles for the Official Service may accept a temporary appointment in the Labor Service without losing his position upon such register of eligibles.

RULE VI.

REQUISITION AND CERTIFICATION.

1. **Requisition.** Whenever a vacancy is to be filled in the Official Service, unless it is to be filled by promotion, the appointing officer shall make requisition upon a form prescribed by the Commission for the certification to him of the name of an eligible. The Commission shall certify to him the name of the person who stands highest on the appropriate register of eligibles and such person shall be appointed.

2. **Sex.** In case the requisition or any statute or ordinance shall specify sex, those of the sex specified shall be certified; otherwise, sex shall be disregarded in certification.

3. **Waiver of Certification.** An eligible may, when his name is reached for appointment, waive certification or decline an appointment tendered, upon giving reasons satisfactory to the Commission, without losing his position upon the register. In the absence of such permission, the effect of an appointment or of a refusal to accept an appointment tendered, shall be to drop the name of the eligible from the register.

RULE VII.

APPOINTMENT.

1. **Appointment.** The law provides that no person shall be appointed to any office or place of employment in the Official Service except under the provisions of these rules.

2. **Temporary Appointment.** In case there is no eligible on the appropriate register and the Commission is unable to comply with a requisition, it may, in its discretion, as provided in said act, to prevent the stoppage of public business or to meet extraordinary exigencies, allow a temporary appointment for a period not exceeding sixty days, and only until a regular appointment can be made through examination.

3. **Vacancies, How Filled.** Vacancies in the Classified Service, if not filled by promotion, shall be filled by requisition and certification, as provided in Rule VI. The appointing officer shall notify the person certified, and fill the place by the appointment of that person. Such appointment shall be on probation for a period of six months. At the end of this period, if the conduct and capacity of the person appointed have been satisfactory, the appointment shall be deemed complete.

4. **Incompetent Probationers.** If any probationer shall, upon fair trial, be found incompetent or disqualified for the performance of the duties of the position he is filling, the appointing officer shall certify the same in writing to the Commission. Upon the approval of the Commission such probationer shall be dropped from the service.

5. **Restoration to Register of Eligibles.** Should the work for which a probationer has been certified prove temporary, and he be laid off without fault or delinquency on his part before his time of probation is completed, his name shall be restored to its proper position upon the register of eligibles and the term he has served shall be credited to him on his probationary period.

6. **Assignment to Duty.** All persons appointed to, or promoted in the Official Service, shall be assigned to and perform the duties of the position to which appointed or promoted. In case of exigency an employe may be temporarily assigned without extra pay to other than his regular duties. But no such assignment shall be for a period of more than ten days without the consent in writing of the Commission thereto.

RULE VIII.

PROMOTION.

1. **Method of Promotion.** All promotion in the Classified Service, unless herein otherwise provided, shall be from grade to grade and shall be made upon voluntary, open, competitive examination. Competition in such examinations shall be limited to the employes in the next lower grade of the same division serving in the department in which the position exists, unless the Commission shall deem it for the interests of the service to admit to competition employes in other grades or other divisions serving in that or other departments.

For a position in any grade above the lowest in any division of the service, the Commission will decide as to the practicability of filling the same through an examination for promotion; or whether the same shall be filled by an examination for original entrance to the service.

2. How Made. In each principal department a board of promotion will be appointed by the Commission, upon consultation with the head of the department. Each board shall consist of not less than three members, not all of whom shall be of the same political party, and the Commission will designate one of the members to act as chairman and another to act as secretary. The Commission may, from time to time, change the membership of such boards.

3. Duties of Boards of Promotion. It shall be the duty of such boards, under the supervision of the Chief Examiner, and by direction of the Commission, to assist in preparing and marking the papers for the promotion examinations in the departments to which they belong, and to perform such other appropriate duties in connection therewith as may be assigned to them by the Commission.

4. Examinations for Promotion. Examinations for promotion will be held in any division, or of the employes in any division serving in any department, when in the opinion of the Commission the interests of the service shall require.

Applications must be recorded by the applicant in person in a book provided for that purpose in the office of the Commission at least three (3) whole days before the date fixed for the examination.

Notice of examinations for promotion will be published as the law directs, and notice will also be posted in the office of the Commission and in the office of the department in which the promotions are to be made, giving date and character of the examinations and defining who are eligible to take the same.

5. Time of Service. No person shall be examined for promotion from any grade in the Official Service until he has served at least one year in such grade; and no person shall be examined for promotion to the rank of lieutenant in Division F (Fire Department) until he shall have served at least four years as a member of the department, and the year of such service immediately preceding the examination shall have been as a pipeman or truckman,

6. **Character of Examinations.** The examinations for promotion shall be practical in character, and shall embrace such subjects as will test the general intelligence of the applicants, and their accuracy and knowledge of the business of the department, and of the branch of service in which they are to be employed, and shall include tests of physical qualifications and health, and, when appropriate, of manual skill. Special examinations for positions requiring technical, professional, or scientific knowledge, or special skill, will be provided by the Commission, from time to time, as the needs of the service may demand; and auxiliary members of the boards of promotion may be appointed to serve for such special examinations.

7. **Credit, How Given.** In all examinations for promotion the physical qualifications and health, the length of previous service, and the efficiency of the applicant shall be given due weight. The credit to be given for efficiency will depend upon the manner in which the records, showing the same, have been kept in the office in which the applicant has served. If so kept as to faithfully show a daily record of his punctuality, industry, ability, habits, and aptitude for the service, maximum credit will be given such record. The mark for efficiency to be used in determining the general average of competitors in promotion examinations will, when based upon a proper record, be the general average of the marks shown by the record during the three months next preceding the examination. A credit of 5 in the subject of seniority will be given for each year of continuous service.

8. **Grading of Competitors.** Each competitor shall be graded on a scale of 100, according to the general average determined by the markings, and no competitor who fails to attain a general average of 70 per centum of complete proficiency in the subjects of the examination taken as a whole, and of such minimum mark as may be fixed by the Commission for any part thereof, shall be deemed eligible for promotion.

9. **Registers of Eligibles.** Registers of persons eligible for promotion in each department and bureau for which promotion examinations are held shall be kept by the Commission.

10. **Making of Certification.** Certification of eligibles for promotion shall be made by the Commission upon requisition of an appointing officer, in groups of three, in the order of standing.

Each eligible shall be entitled to three certifications and the appointing officer must choose one name from each certification, and the one so chosen shall receive the promotion. A name that has been certified three separate times and not selected by the appointing officer shall be removed from the list of eligibles.

11. Priority of Certification. In certifying from the registers for promotion, when two or more eligibles have the same general average, preference in certification shall be given in the order of seniority of service.

12. Change of Compensation. Increasing or diminishing the compensation of any position in the official service, whereby the grade of such position as established by the classification is changed, whether done by ordinance or otherwise, shall not affect the tenure of the incumbent of such office or place of employment, unless in the opinion of the Commission such change shall involve a change in duties requiring a different examination.

RULE IX.

REMOVAL.

1. How Made. The removal of an officer or an employe, who has been appointed to the official service in accordance with these rules, can only be made as provided in section twelve of said act.

2. Cause for Removal. Charges, How Made. Section twelve of said act provides that no officer or employe in the classified service who shall have been appointed under these rules and after examination shall be removed or discharged except for cause, upon written charges, and after an opportunity to be heard in his own defense. When a removal is deemed necessary, the appointing officer shall immediately notify the Commission, in writing, of the grounds therefor. Such grounds shall be investigated by the Commission, and the accused person shall be given an opportunity to be heard in his own defense. The finding and decision of the Commission shall be certified to the appointing officer, and shall be forthwith enforced by said officer. Pending such investigation, the appointing officer may suspend the accused for a reasonable period, not exceeding thirty days. Nothing in this section shall be construed to require such charges or investigation in cases of laborers or persons having the custody of public money, for the safe-keeping of which another person has given bonds.

RULE X.

REPORTS TO BE MADE.

1. **Appointing Officers to Report.** For the purpose of certification to the Comptroller for the payment of salaries, as required by section thirty of said act, and in order that the Commission may keep proper record of changes in the service, each appointing officer shall immediately report to the Commission, as required by section thirteen of said act:

- (a) Every probational or temporary appointment made by him.
- (b) Every refusal or neglect to accept an appointment under him by a person who has been duly certified.
- (c) Every change in the compensation of any officer or employe serving under him.
- (d) Every suspension made by him of any officer or employe.
- (e) Every separation from the service under him, and whether the separation was caused by dismissal, resignation, or death.

2. **Change or Abolition of Office or Compensation.** When any office or place of employment is created or abolished, or the compensation attached thereto altered, the officer or board making such change shall immediately report it, in writing, to the Commission.

3. **Civil List.** A list to be known as the Civil List of the City of Chicago shall be kept in the office of the Commission, to contain the name of every person employed in, or receiving compensation in, the Classified Service. The list shall show respecting every officer and employe: The title of his office, the salary or compensation thereto attached, the time he has held such office, the time he has been in the service of the City of Chicago, and the places in that service he has filled, a brief specification of the duties of the office, by whom the appointment thereto is made, and the term, if any, of the office.

4. **Payment of Salaries.** As provided in section thirty-one of said act, no payment in compensation for services rendered, after the taking effect of these rules, can be made by the city, or any of its officers, to a person holding a position in the Classified Service until it appears either that he was employed in such position before these rules took effect, or that he has been employed under the provisions of the same, and is holding his position in accordance therewith.

RULE XI.

POLICE DEPARTMENT.

ORIGINAL APPOINTMENT.

All original appointments on the police force shall be as second class patrolmen. Every applicant for the uniformed police force, in addition to the requirements specified in Section 1, of Rule II, must, at the time of such application, be between twenty-one and thirty-five years of age, not less than five feet eight inches in height (in his bare feet), and of a weight which shall fall within the limits below prescribed, and have a quiescent chest measurement of not less than the figures below given; provided, however, that applicants who have had previous experience in said department, and who were separated therefrom without fault or delinquency on their part, may deduct from their actual age any time not exceeding five years, during which they have continuously served in said department:

| Height. | Minimum Weight. | Maximum Weight. | Minimum Circumference of Chest, Quiescent.* |
|------------------|-----------------|-----------------|---|
| 5 feet 8 inches. | 145 pounds. | 185 pounds. | 35 inches. |
| 5 " 9 " | 150 " | 190 " | 35½ " |
| 5 " 10 " | 155 " | 195 " | 36 " |
| 5 " 11 " | 160 " | 205 " | 37 " |
| 6 " | 165 " | 210 " | 37½ " |
| 6 " 1 " | 170 " | 215 " | 38 " |
| 6 " 2 " | 175 " | 225 " | 39 " |
| 6 " 3 " | 180 " | 230 " | 40 " |
| 6 " 4 " | 185 " | 235 " | 41 " |

* NOTE.—A modification of the chest measurement required in this schedule may be allowed as follows:

To an applicant whose height is between five feet nine inches and six feet, a reduction of one inch or any fraction thereof.

To an applicant whose height is six feet or over, a reduction of one and one-half inches or any fraction thereof.

Provided, that in each case the applicant shall have a chest expansion of three inches or more.

The applicant must successfully pass such physical examination as shall be prescribed by the Commission.

RULE XII.

FIRE DEPARTMENT.

ORIGINAL APPOINTMENT.

All original appointments to the uniformed force of the Fire Department, shall be made to the lowest grade in the several branches of said service, and advancement to the higher grades

shall be by promotion, in accordance with the provisions of Rule VIII. Every applicant, in addition to the requirements specified in Section 1, of Rule II, must, at the time of the examination, be between the ages of twenty-one and thirty-three years, not less than five feet seven inches in height (in bare feet), and his weight and circumference of chest must be in accordance with the following table; provided, however, that applicants who have had previous experience in said department, and who were separated therefrom without fault or delinquency on their part, may deduct from their actual age any time, not exceeding five years, during which they have continuously served in said department:

| Height. | | Minimum Weight. | Maximum Weight. | Minimum Circumference of Chest, Quiescent.* |
|---------|-----------|-----------------|-----------------|---|
| 5 feet | 7 inches. | 140 pounds. | 180 pounds. | 34 inches. |
| 5 " | 8 " | 145 " | 185 " | 35 " |
| 5 " | 9 " | 150 " | 190 " | 35½ " |
| 5 " | 10 " | 155 " | 195 " | 36 " |
| 5 " | 11 " | 160 " | 200 " | 37 " |
| 6 " | " | 165 " | 210 " | 37½ " |
| 6 " | 1 " | 170 " | 215 " | 38 " |
| 6 " | 2 " | 175 " | 225 " | 39 " |
| 6 " | 3 " | 180 " | 230 " | 40 " |
| 6 " | 4 " | 185 " | 235 " | 41 " |

* NOTE.—A modification of the chest measurement required in this schedule may be allowed as follows:

To an applicant whose height is between five feet nine inches and six feet, a reduction of one inch or any fraction thereof.

To an applicant whose height is six feet or over, a reduction of one and one-half inches or any fraction thereof.

Provided, that in each case the applicant shall have a chest expansion of three inches or more.

There shall be a difference of at least two inches between forced and full inspiration.

The applicant must successfully pass such physical examination as shall be prescribed by the Commission.

RULE XIII.

TRANSFERS.

Transfers within the Classified Service may be made as follows:

1. **Within the Same Department, in the Same Division and Grade.** Temporary transfers, for a period not exceeding thirty days, of persons from one position to another position in the same grade and same division of the service, and within the same department, may be made by the head of the department without notice

to the Commission. Where such transfer is intended to be permanent, and the name thereafter to appear on a different pay roll, then notice must be sent to the Commission, that entry of the same may be made upon its records, and its consent in writing obtained therefor.

2. **To Another Division in Same Department.** Transfers, without examination, of persons from one division of the service to another division, but in the same grade and within the same department, may be made by the head of the department, upon giving due notice of the same to the Commission, and obtaining its consent in writing thereto.

3. **To a Similar Position in Another Department.** Transfers, without examination, from a position in one department to a similar position in another department, may be made on obtaining the consent in writing of the head of the department from which the transfer is desired, the request in writing of the head of the department to which such transfer is to be made, and the approval of the Commission in writing; provided, however, that such transfer must be within the same grade and division of the service.

RULE XIV.

REINSTATEMENT.

Method of. Upon requisition of the head of a department the Commission may, in its discretion, certify for reinstatement in said department, in the same division and in the same grade in which he was formerly employed, any person who shall have been appointed under its rules and after examination, and who within one year next preceding the date of the requisition, has, through no delinquency or misconduct, been separated from the Classified Service of that department.

CLASS B. LABOR SERVICE.

RULE XV.

Extent of Labor Service. All places of employment requiring skilled or unskilled labor, which are not included in either the Unclassified or the Official Service, and coming under the provisions of said act, shall constitute the Labor Service.

RULE XVI.

CITIZENSHIP, RESIDENCE, QUALIFICATIONS, AND
AGE OF APPLICANTS.

1. **Citizenship, Residence and Qualifications.** No person shall be admitted to examination for a position in the Labor Service who is not a citizen of the United States and who has not been an actual resident of the City of Chicago for at least one year next preceding the date of examination. Mechanics must have served not less than four years as journeymen at their respective trades.

2. **Age.** No person will be admitted to examination who is less than twenty years of age at the date of examination; except that for minor places, such as errand boys, water carriers, etc., applications may be received from persons between fifteen and twenty years of age.

RULE XVII.

APPLICATION, HOW MADE.

Form of Application. Application for admission to the Labor Service must be made in form and manner, and under the same restrictions as prescribed in Rule III for admission to the Official Service.

RULE XVIII.

EXAMINATION OF LABORERS.

1. **Examination.** Upon the return of the application blank duly filled out and signed by the applicant with his name or mark, together with the required certificates of his habits as to industry and sobriety duly filled out and executed, the Commission will number the application in the order of its receipt and notify the applicant of the time and place of his examination for registry as hereinafter provided. At the time and place so specified such examiner or examiners as may be selected by the Commission shall, in such manner as it shall prescribe, make inquiry regarding the age, residence, citizenship, character, physical condition, family, previous occupation and experience of the applicant, and ascertain and determine whether he is qualified for the employment sought, and shall endorse a statement of the determination in that regard and the reasons for it upon his application, with a brief personal descrip-

tion of the applicant. Note will be made of superior physical qualifications. The applicants shall be graded: First, upon their physical qualifications; second, upon their own account of themselves, their occupation and experience; third, upon their knowledge of the requirements of their work, the necessary tools, the manner of doing the work they seek and like matters. No educational test of qualifications shall be required for common laborers. Any wilfully false statement or fraudulent conduct on the part of the applicant shall disqualify him for registration.

2. **Certificates.** For any service other than that of common labor the applicant will be required to produce a certificate from some competent person or persons, in the same trade or occupation, of the applicant's ability to do the special kind of work in which he desires to be employed.

RULE XIX.

REGISTRATION OF LABORERS.

1. **Registers.** Registers for each trade and the different branches of labor in the city service shall be kept in the office of the Commission.

2. **Order of Registration.** The names of applicants who have been found by the examiners qualified for the employment sought, shall be entered upon the appropriate registers in the order of rating fixed by the examiners, but no person shall be enrolled upon more than two registers without the consent of the Commission.

3. **Registers According to Districts.** The Commission may, if the needs of the service seem to require, divide the city into districts and make separate registers of laborers residing in each of such districts. The Commission may change such districts at any time, and such registers may be consolidated into one or more registers.

4. **Re-employment After Removal.** No employe whose employment is terminated by reason of failure or refusal to do the work assigned to him, incompetency, drunkenness, physical or moral disqualification, shall be retained upon the register, or be again eligible for registration, until the expiration of six months from the date of such termination and then only upon furnishing to the Commission satisfactory reasons for his failure to do the work, and

satisfactory evidence that incompetency, or physical or moral disqualification for the employment for which he seeks to be registered does not exist.

5. Regulations to be Made. The Commission will make such regulations as it may deem necessary to identify the registered applicants, and to preserve a record of their conduct.

RULE XX.

PROMOTION OF LABORERS.

1. Method of Promotion. Promotion may be made from one rate of compensation to another in the same kind of employment. Preference in promotion shall be given to those who have been longest in the service, who have been found faithful and efficient, and who are qualified for such promotion. Helpers may be promoted to journeymen in the trade in which they are registered, after four years' service in that trade, subject to the above restrictions. Such promotions shall depend only upon proficiency, industry, regularity of attendance, interest shown in the work, quality of work, and good conduct.

2. Foremen. Foremen whose positions are reasonably permanent and whose duties are responsible and important, will, as a rule, be regarded as in the Official Service, and vacancies will be filled as occasion may require through examination for promotion, or for original entrance, as the Commission may at the time decide.

3. Promotion from the Ranks. Whenever practicable, the position of foreman not in the Official Service, assistant foreman, head laborer or gangman, shall be filled by promotion from the ranks. Such promotion shall be on the basis of ascertained merit and seniority, and upon the record as to efficiency, sobriety, and ability shown in the public service.

The head of the department in which the promotion is to be made shall nominate to the Commission the person in the service of that department or bureau who, in his judgment, on the basis above given, is best entitled to the promotion; and on the written approval of the Commission the promotion shall be made.

When it is found impracticable to fill any such place by promotion, the Commission will hold open examination for the same.

4. Promotion from Labor to Official Service. Promotion may be made from the Labor Service to the Official Service upon

ERRATUM.

The following four sections, comprising Rule XX in the preceding edition of the printed rules, were, through error, omitted in printing this edition. They are still in force as a part of the rules adopted by the Commission:

REQUISITION AND CERTIFICATION.

1. **Method of Certification.** When the services of laborers are required the appointing officer shall notify the Commission, stating the number of men needed, the particular kind of labor for which they are wanted, and the time and place of employment. The Commission shall thereupon certify to the appointing officer the names and residences of the number of men called for. In making certification, those names on the register of the division covering the particular kind of labor called for, shall be given preference in the order of the rating, who, within one year next preceding, have satisfactorily served in the department, or bureau, from which the requisition is made. If there are no such persons, then certification shall be made in the order of general average, as fixed on examination, but regard may be had to a request by an appointing officer for preference to be given on account of age, physical qualifications, or residence in the district where the work is to be done. The persons thus certified shall thereupon be employed in the order of their rating.

2. **Waiver of Employment.** An eligible on any register in the Labor Service to whom employment is tendered, who fails to report for duty when called upon, must, within ten days of such failure, present reasons satisfactory to the Commission in explanation of the same; otherwise his name will be dropped from the register.

3. **Employment of Laborers.** On being laid off from service in any department an eligible desiring further employment will return to the office of the Commission with a card from the employing officer, stating the date and reason of being laid off, and whether or not the services have been satisfactory. The names of all whose services have been found satisfactory will be retained on the register of eligibles for further certification.

4. **Emergency Appointments.** To prevent the stoppage of public business or to meet extraordinary exigencies, the appointing officer may, with the approval of the Commission, make a temporary appointment without requisition upon the Commission; provided, however, that in no case shall such temporary employment continue for more than sixty days, and only until regular employment can be made under these rules. No employment of the same person or of another to the same position at the end of such period shall be allowed under this rule.

application and examination in the same manner as provided for original entrance to the position sought. Credit will be given to such applicants for efficiency and seniority while serving in the temporary, or labor service, as provided in Rule VIII, Section 7.

RULE XXI.

REPORTS TO BE MADE.

Appointing Officers to Report. For the purpose of certification to the Comptroller for the payment of wages, as required by section thirty of said act, and in order that the Commission may keep proper record of changes in the service, each appointing officer will immediately report to the Commission the names and registry numbers of the persons employed upon certification, with the date of such employment and the compensation, and upon the termination of the employment, shall report the date of such termination, the reason thereof, and whether the service rendered has been satisfactory. These reports shall be made upon forms prescribed by the Commission.

RULE XXII.

REDUCTION OF FORCE.

Dropping of Laborers. When, by reason of want of work, reductions are made in the force of laborers or workmen, those least efficient shall first be laid off. Foremen shall be given priority for retention in some capacity, and, as an incentive to the proper and fearless performance of duty, shall be among the last to be laid off.

APPENDIX H.

GROUPING OF GRADES.

At different meetings of the Commission, as appears of record in the minutes thereof, grades have been grouped together in several different divisions of the service, under authority granted in Section 5, Rule I.

In all cases such action has been taken to meet existing conditions; to make more practicable examinations for original entrance or promotion, and, in the judgment of the Commission, for the benefit of the service.

The action taken in each case is regarded as temporary and only to stand until, under changed conditions or in the light of experience, it shall be amended or rescinded at some future meeting of the Commission.

Action has been taken as follows:

DIVISION C—CLERICAL SERVICE.

Grades 1 and 2 grouped together and made the entering grade for that division, and to be considered as one grade for purpose of examination for original entrance or promotion.

Minutes of meeting of November 23, 1895.

DIVISION B—CIVIL ENGINEERING.

Grades 2 and 3 grouped together and made the entering grade for that division, and to be considered as one grade for the purpose of examination for original entrance or promotion.

Also grades 4, 5, and 6 grouped together and considered as one grade for purpose above stated.

Persons appointed or promoted through examination may, if filling positions in lower grades, be advanced up to, but not above, the highest of the grades as grouped, upon requisition and recommendation of the head of a department and approval of the Commission, without further examination.

Minutes of meeting of March 18, 1896.

DIVISION E—ELECTRICAL SERVICE.

Grades 1 and 2 grouped together and considered as one grade for purpose of examination for original entrance or promotion in said division.

Minutes of meeting of April 9, 1896.

DIVISION I—INSPECTION SERVICE,

DEPARTMENT OF PUBLIC WORKS.

Grades 1, 2, and 3 grouped together and considered as one grade for purpose of examination for original entrance or promotion in said division.

Minutes of meeting of April 9, 1896.

DIVISION L—MISCELLANEOUS.

Grades 1 and 2 grouped together and considered as one grade for purpose of examination for original entrance or promotion.

Grades 3, 4, 5 and 6 grouped together for purpose of examination for original entrance or promotion.

Persons who have passed examinations, either original entrance or promotion, and are serving in either of the lower grades as grouped, may be advanced up to, but not beyond, the highest grade within the group in which they are serving, without further examination, on requisition and recommendation of the head of a department and written approval of the Commission.

Minutes of meeting of July 3, 1896.

DIVISION G—MECHANICAL ENGINEERING.

Grades 1 and 2 grouped together and considered as one grade for purpose of examination for original entrance or promotion.

Minutes of meeting of September 2, 1896.

DIVISION F—FIRE DEPARTMENT.

Grades 1 and 2 grouped together and considered as one grade for purpose of examination for original entrance or promotion.

Minutes of meeting of December 23, 1896.

DIVISION J—JANITOR AND ELEVATOR SERVICE.

Grades 1 and 2 grouped together and considered as one grade for purpose of examination for original entrance or promotion.

Minutes of meeting of December 23, 1896.

RULINGS AND PRECEDENTS
OF THE
COMMISSION
AND
OPINIONS
OF THE
CORPORATION COUNSEL.

APPENDIX I.

Rulings and Precedents of the Commission.

Limitation of residence in Chicago waived in case of examination for assistant chemists (Feb. 12) under provision of Section 3, Rule II. (Minutes, Jan. 27, 1896.)

When it becomes necessary to reduce the force because of lack of work or insufficient appropriation, no discrimination shall be made against a civil service appointee because of his being out-ranked in time of service by others in the same department or bureau. (Minutes, Mar. 25, 1896.)

A per diem compensation cannot be used as a basis for definitely determining the grade to which a position belongs; the Commission will decide in each case as to whether the holders of such positions are eligible to take a given promotion examination. (Minutes, Apr. 9, 1896.)

In holding examinations and in preparing lists of eligibles, the duties of the position to be filled, rather than the name by which it is called, shall be considered, so that from the same list persons may be certified to a number of positions differing in name but similar in qualifications required. (Minutes, Apr. 9, 1896.)

The term of service of all its employes must be during the pleasure of the Commission and it cannot bind itself or its successors by promises to take effect at some future date. (Minutes, Apr. 16, 1896.)

Residence in the City of Chicago is as essential for certification as for examination. (Minutes, Apr. 16, 1896.)

The Commission declines to receive formal charges from any source as the basis for an investigation under Section 14 of the Act, but at all times gladly receives information from any source in regard to matters proper to be brought before it. (Minutes, May 26, 1896.)

The Commission denies to a witness before it the right to have an attorney to instruct him how to testify. (Minutes, May 26, 1896.)

The Commission, having no jurisdiction as to the removal of an employe who was not appointed under the rules and after examination, has no power to authorize the reinstatement of any such person, except in accordance with the rules, and after examination. (Minutes, Oct. 19, 1896.)

APPENDIX J.

Opinions of the Corporation Counsel.

The compensation of \$5.00 per day to an examiner is one which may be reduced or waived altogether, at the pleasure of the examiner, by agreement between the examiner and the Commission.

A member of the Board of Directors of the Public Library is to be regarded as a person in the Official Service of the city within the meaning of the provisions of the Civil Service Law relating to examiners. *Contra*, in case of a member of the Board of Education. (Official opinion, minutes, Feb. 29, 1896.)

City officers and employes, called to testify before the Commission, are still entitled to their ordinary compensation but are not entitled to witness fees. They ought to be reimbursed for any actual expenses incurred. (Official opinion, minutes, May 26, 1896.)

The law does not authorize the Commission to make any residence limitation applicable to those actually in the service of the city. But the Commission may make a rule providing that the removal of residence from the city will be considered sufficient cause for discharge in all cases under Section 12 of the Civil Service Law. (Official opinion, minutes, July 1, 1896.)

As to whether public vaccinators and medical inspectors are in the Classified Service, the method of payment is non-determinative; the question turns upon whether or not they are employes of the city within the meaning of the Civil Service Law. If in the regular and exclusive employment of the city they come under the Civil Service Law; while, on the other hand, if they are persons having independent vocations outside of their city employment and are merely performing special and transitory service to the city as incidental to their regular work, they are not to be regarded as under the Civil Service Law. (Official opinion, minutes, Sept. 3, 1896.)

A "principal department" is one which, in the main, is sub-

ordinate only to the City Council and to the Mayor. Subordinate divisions of the municipal service, though they may be spoken of as departments, can hardly be regarded as principal departments, within the meaning of the law. It would be more proper to call them "bureaus." (Official opinion, minutes, Oct. 5, 1896.)

A fireman on the retired list is still to be legally regarded as a member of the Fire Department and subject to restoration to the place from which he was retired, if upon examination it is disclosed that he is able to perform its duties. He need not take the civil service examination. (Official opinion, minutes, Oct. 5, 1896.)

List of city officers or employees excepted from Classified Service under Section 11 of the Civil Service Act:

I. ELECTED BY THE PEOPLE.

Mayor.

Members of the City Council.

City Clerk.

City Attorney.

City Treasurer.

II. ELECTED BY THE CITY COUNCIL.

Sergeant-at-Arms of the Council.

III. APPOINTED BY THE MAYOR SUBJECT TO CONFIRMATION
BY THE CITY COUNCIL.

Comptroller.

City Collector.

Corporation Counsel.

Prosecuting Attorney.

Commissioner of Public Works.

Deputy Commissioner of Public Works.

Inspector of Steam Boilers.

Inspector of Fish.

Inspector of Gas Meters.

Inspector of Oils.

Inspector of Weights and Measures.

Superintendent of Markets.

Superintendent of Street and Alley Cleaning Bureau.

Harbor Master.

Assistant Harbor Master.

Vessel Dispatcher.

Assistant Vessel Dispatcher.

Bridge Tenders.
 General Superintendent of Police.
 Police Justices.
 Police Court Clerks.
 Police Court Bailiffs.
 Pound Keepers.
 Commissioner of Health.
 City Physician.
 Commissioner of Buildings.
 Fire Marshal.
 Library Board.
 Inspectors of House of Correction.
 Board of Examining Engineers.

IV. SPECIFICALLY EXCEPTED UNDER SECTION 11 OF ACT.

Members of Board of Education.
 Superintendent and Teachers of Schools.
 Judges and Clerks of Election.
 One Private Secretary to Mayor.
 Members of Law Department whose duties require knowledge of law.

V. EXCEPTED BY OTHER SECTIONS OF THE CIVIL SERVICE ACT.

The Chief Examiner and all other examiners of the Civil Service Commission. (Official opinion, minutes, Dec. 31, 1896.)

TABLE OF OFFICES
AND
PLACES OF EMPLOYMENT.

APPENDIX K.

TABLE OF OFFICES AND PLACES OF EMPLOYMENT IN THE SERVICE
OF THE CITY OF CHICAGO, ARRANGED ALPHABETICALLY.

The following list embraces, as nearly as can now be ascertained, all the offices and places of employment in the service of the City of Chicago, as classified by the Civil Service Commission.

In accordance with Section 2, of Rule I, the Commission may, as occasion arises or the interests of the service require, decide to which class and division any particular office or place of employment shall belong. Until further action shall be taken by the Commission, the classification will be as given in the following table:

NOTE.—The word "Various," when used in the table, indicates that the position in connection with which the word is used exists in more than one department, grade or division, as the case may be.

CLASSIFIED SERVICE.

| Position. | Department. | Class. | Division. | Grade. |
|------------------------------|-----------------------|--------|-----------|---------|
| Accountant | Public Works..... | A | C | Various |
| Architect | " | A | L | 5 |
| Assessor..... | " | A | C | 5 |
| Assessor (Assistant)..... | " | A | C | 3 & 4 |
| Bacteriologist..... | Health | A | A | 7 |
| Bacteriologist (Ass't) | " | A | A | 2 |
| Baker | House of Correction.. | B | | |
| Barn Man..... | Various..... | B | | |
| Battery Man..... | " | A | E | 2 |
| Blacksmith | " | B | | |
| Boiler Washer..... | " | B | | |
| Bookkeeper | " | A | C | Various |
| Box Man | " | B | | |
| Bricklayer | " | B | | |
| Brickmaker | House of Correction.. | B | | |
| Bridge Tender (Ass't)..... | Public Works..... | A & B | H | Various |
| Calker..... | Various..... | B | | |
| Captain | " | A | D & F | Various |

| Position. | Department. | Class. | Division. | Grade. |
|--------------------------------------|-----------------------|--------|-----------|---------|
| Carpenter | Various..... | B | | |
| Cashier | " | A | C | Various |
| Cataloguer | Library | A | K | " |
| Cell-house Keeper..... | House of Correction.. | A | J | 1 |
| Cement Tester..... | Public Works..... | A | I | 5 |
| Chemist | Health | A | A | 5 |
| Chemist (Ass't) | " | A | A | 3 |
| Chief of Battalion..... | Fire | A | F | 10 |
| Chief of Construction | " | A | E | 7 |
| Chief of Repair Shop..... | " | A | L | 7 |
| Cleaner | " | B | | |
| Clerk | Various..... | A | C | Various |
| Coal Passer | Public Works..... | B | | |
| Collector of Water Samples.. | Health | B | | |
| Commissioner (Ass't) | " | A | A | 8 |
| Constable (Acting)..... | Police | A | D | 3 |
| Cook | Various | B | | |
| Cribkeeper..... | Public Works..... | A | L | Various |
| Crossing Man..... | Police | A | D | 1 |
| Custodian | " | A | C | 5 |
| Detective..... | " | A | D | 4 |
| Dog Catcher..... | Various | B | | |
| Draughtsman..... | " | A | B & L | Various |
| Driver | " | A | Various | Various |
| Dynamo Cleaner..... | Fire | B | | |
| Dynamo Tender..... | " | A | E | 2 |
| Electrician..... | Various | A | E | 1 & 2 |
| Elec. Ins't. Maker and Repairer..... | Fire | A | E | 1 |
| Elevator Operator..... | Public Works..... | A | J | 1 |
| Elevator Starter..... | " | A | J | 2 |
| Engineer | Various | A | Various | Various |
| Expert on Water Fixtures.. | Public Works..... | A | L | 4 |
| Fireman..... | Various | B | | |
| Fitter | " | B | | |
| Foreman..... | Various | A & B | L | Various |
| Forge Man..... | " | B | | |
| Fumigator..... | Health..... | A | A | 3 |
| Gangman..... | Public Works..... | B | | |
| Gardener | " | B | | |
| Glazier | Various | B | | |
| Guard | House of Correction.. | A | J | 1 |
| Harness Maker..... | Various | B | | |
| Helper | " | B | | |
| Hospital Steward | House of Correction.. | A | L | 4 |
| Hostler..... | Various | B | | |

TABLE OF OFFICES, ETC.

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| Position. | Department. | Class. | Division. | Grade. |
|----------------------------|------------------------|--------|-----------|---------|
| Housekeeper..... | House of Correction.. | A | L | 1 |
| Hydrant Builder..... | Public Works..... | B | | |
| Inspector..... | Various | A | Various | Various |
| Inspector (Ass't) | " | A | " | " |
| Janitor and Janitress..... | " | A & B | J | " |
| Laborer | " | B | | |
| Lamplighter | Gas Inspection..... | B | | |
| Lamp Repairer | Fire..... | A | E | 1 & 2 |
| Lamp Trimmer | " | A | E | 1 |
| Leak and Waste Man..... | Public Works..... | B | | |
| Leveler | " | A | B | 3 |
| Librarian | Public Library..... | A | K | 10 |
| Librarian (Ass't) | " | A | K | Various |
| License Officer..... | Various | A | C & D | 3 |
| Lieutenant..... | " | A | D & F | 4 |
| Lineman | Fire..... | A | E | 2 |
| Machinist..... | Various | B | | |
| Mason..... | " | B | | |
| Matron | " | A | L | 1 & 2 |
| Messenger..... | " | A | C | Various |
| Meter Setter | Public Works..... | A | C | |
| Milk Tester..... | Health | A | A | 1 |
| Molder | Various | B | | |
| Nurse | Health | A | A | 2 |
| Office Boy | Library..... | A | C | 1 |
| Officer of Bus..... | House of Correction.. | B | | |
| Oiler | Various | B | | |
| Operator | " | A | E | Various |
| Operator (Ass't) | " | A | E | " |
| Painter | " | B | | |
| Parkkeeper..... | Public Works..... | B | | |
| Patrolman | Police | A | D | 1 & 3 |
| Pattern Maker | Various | B | | |
| Paver | Public Works..... | B | | |
| Paymaster | Comptroller | A | L | 6 |
| Photographer..... | Police | A | L | 5 |
| Photographer (Ass't) | " | A | L | 3 |
| Physician..... | Isolation Hospital.... | A | A | 7 |
| Pilot..... | Fire..... | A | F | 4 |
| Pipeman | " | A | F | 2 & 3 |
| Plumber..... | Various | B | | |
| Printer | " | A | L | 1 & 4 |
| Purchasing Agent..... | Public Works..... | A | L | 6 |

| Position. | Department. | Class. | Division. | Grade. |
|---------------------------------|-----------------------|--------|-----------|---------|
| Rammer..... | Public Works..... | B | | |
| Rate Taker | " | A | C | |
| Receiving Officer | House of Correction.. | A | C | 1 |
| Registrar | Public Works..... | A | C | 2 & 4 |
| Registrar Vital Statistics..... | Health | A | A | 4 |
| Reg. Vital Statistics(Ass't)... | " | A | C | 4 |
| Repairer | Various | A & B | E | 2 & 3 |
| Rigger | Public Works..... | B | | |
| River Police..... | " | A | L | 2 |
| Rodman | Various | A | B | 2 & 3 |
| Saddler..... | Police | B | | |
| Screen Man..... | Various | B | | |
| Scrub Woman | " | B | | |
| Sealer, Deputy..... | Weights & Measures.. | A | C | Various |
| Secretary | Various | A | Various | Various |
| Sergeant | Police | A | D | 4 & 5 |
| Shopkeeper..... | House of Correction.. | A | C | 1 |
| Shut-off Man | Public Works..... | A | C | 2 |
| Sign Etcher | Gas Inspection..... | B | | |
| Stenographer | Various | A | C | Various |
| Stoker..... | Fire | A | F | 3 |
| Storekeeper | House of Correction.. | A | C | 1 |
| Superintendent..... | Various | A | Various | Various |
| Superintendent (Ass't)..... | " | A | " | " |
| Tallyman | " | B | | |
| Tapper | Public Works..... | B | | |
| Teller | Various | A | C | 3 & 6 |
| Timekeeper | " | B | | |
| Time and Storekeeper..... | Fire | A | C | 2 |
| Tinner | Various | B | | |
| Transit Man..... | Public Works..... | A | B | 4 |
| Truckman | Fire | A | F | 2 & 3 |
| Tunnel Expert..... | Public Works..... | A | I | 7 |
| Typewriter | Various | A | C | 1 |
| Vaccinator..... | Health..... | A | A | 2 |
| Veterinary Surgeon..... | Various | A | A | Various |
| Wagonmaker | Police | B | | |
| Watchman..... | Various | A | J | Various |
| Water Boy..... | Public Works..... | B | | |
| Weigher..... | " | A | C | 1 & 2 |
| Welltender..... | " | B | | |
| Woodworker..... | Fire | B | | |
| Yardman | Public Works..... | B | | |

LIST OF CITY OFFICERS OR EMPLOYES EXCEPTED
FROM CLASSIFIED SERVICE UNDER SECTION 11
OF THE CIVIL SERVICE ACT.

I.

ELECTED BY THE PEOPLE.

Mayor.
Members of the City Council.
City Clerk.
City Attorney.
City Treasurer.

II.

ELECTED BY THE CITY COUNCIL.

Sergeant-at-Arms of the Council.

III.

APPOINTED BY THE MAYOR SUBJECT TO CONFIRMATION
BY THE CITY COUNCIL.

Comptroller.
City Collector.
Corporation Counsel.
Prosecuting Attorney.
Commissioner of Public Works.
Deputy Commissioner of Public Works.
Inspector of Steam Boilers.
Inspector of Fish.
Inspector of Gas Meters.
Inspector of Oils.
Inspector of Weights and Measures.
Superintendent of Markets.
Superintendent of Street and Alley Cleaning Bureau.
Harbor Master.
Assistant Harbor Master.
Vessel Dispatcher.
Assistant Vessel Dispatcher.
Bridge Tenders.
General Superintendent of Police.
Police Justices.
Police Court Clerks.

Police Court Bailiffs.
Poundkeepers.
Commissioner of Health.
City Physician.
Commissioner of Buildings.
Fire Marshal.
Library Board.
Inspectors of House of Correction.
Board of Examining Engineers.

IV.

SPECIFICALLY EXCEPTED UNDER SECTION 11 OF THE ACT.

Members of Board of Education.
Judges and Clerks of Election.
Superintendent and Teachers of Schools.
One Private Secretary to Mayor.
Members of Law Department whose duties require knowledge of law.

V.

EXCEPTED BY OTHER SECTIONS OF THE CIVIL SERVICE ACT.

The Chief Examiner and assistants and the medical examiners of the Civil Service Commission.
(See opinion of Corporation Counsel, minutes, Dec. 31, 1896.)

INSTRUCTIONS TO APPLICANTS.

APPENDIX L.

INSTRUCTIONS TO APPLICANTS FOR POSITIONS IN THE CLASSIFIED SERVICE OF THE CITY OF CHICAGO.

ALL APPLICANTS ARE REQUESTED TO READ CAREFULLY THE INSTRUCTIONS
WHICH FOLLOW, AND TO CONFORM STRICTLY THEREWITH.

1. SUGGESTIONS.

These instructions should be carefully read, as they answer most of the questions which applicants ask. The Commission can not undertake to answer inquiries as to vacancies in the service, duties, salaries, prospects of appointment or promotion. Inquiries in regard to examinations and other business of this Commission should be made directly to the Civil Service Commission and preferably by calling in person at the office of the Commission.

The following information will aid the applicant in deciding what place he can best fill. The places are in two groups: *First*, technical places, requiring special training and experience, such as stenographers, inspectors of street repairs, steam and electrical engineers, and the like; and, *second*, places requiring more general and less special qualifications, such as clerks, policemen, firemen and watchmen.

2. REQUIREMENTS FOR DIFFERENT GRADES OF THE SERVICE.

The Official Service is divided into (A) Medical Service; (B) Civil Engineering; (C) Clerical Service, embracing copyists, clerks, pages, messengers, recorders, bookkeepers, stenographers, time-keepers, weighers and similar employes; (D) Police Service; (E) Electrical Service; (F) Fire Service; (G) Mechanical Engineers; (H) Bridge Employes; (I) Inspectors; (J) Janitors, elevator conductors and the like; (K) Library Service; (L) all others.

Persons may take examinations for more than one position, but it is not practicable to give more than one examination at the same time and place.

A. Medical Service. Applicants for positions as physicians must be regular graduates of some reputable medical college and have been actually engaged in the practice of medicine. Applicants for other positions in this service will be required to possess such knowledge of sanitary matters, hygiene, and like subjects, as the duties of the position sought may require.

B. Civil Engineering. Applicants for positions as civil engineers will be required to show a competent knowledge of and practical acquaintance with the profession of civil engineering. Draftsmen, rodmen and other subordinates will be given appropriate practical tests.

C. Clerical Service. Applicants for clerical places are likely to be examined in:—

1. HANDWRITING.
2. SPELLING.
3. PLAIN COPYING.
4. FUNDAMENTAL RULES OF ARITHMETIC.
5. FRACTIONS AND PERCENTAGE.
6. COPYING FROM ROUGH DRAFT.
7. CLEAR AND *CORRECT STATEMENT.
8. LETTER WRITING.

Supplementary tests may be taken in stenography, typewriting, bookkeeping, translating from foreign languages, proof reading, etc., according to the qualifications required for the kind of position sought. Pages and messengers will be examined in the first four subjects of the clerk examination.

D. Police Service. Applicants must pass the physical tests and an examination in the first four subjects of the clerical examination.

E. Electrical Service. The examinations will cover such knowledge of electricity as the duties of positions in this division may require.

F. Fire Service. Applicants must pass the physical tests, and an examination in the first four subjects of the clerical examination.

G. Mechanical Engineers. The examinations will embrace the first four subjects of the clerical examination and practical tests in mechanical engineering. Applicants for positions as stationary engineers must produce a license from the proper authorities.

H. Bridge Service. The subjects of examination for these positions will be the first four subjects of the clerical examination, and where necessary, electrical and steam engineering. Applicants must be physically capable of performing the work they will be called upon to do.

I. Inspection Service. The subjects of examination in addition to the first four subjects of the clerical examination, to show ability to make written reports, will embrace practical tests in the work to be performed.

J. Janitor and Elevator Service. The examination for janitors, elevator conductors, watchmen, etc., will be of a practical character and so conducted as to bring out the applicants' special fitness for the position in question.

K. Library Service. The subjects of examination, in addition to the first four subjects of the clerical examination, will embrace, where essential, a knowledge of classical and foreign languages, card-cataloguing, indexing, and other technical details of library work, and general literature. For a more definite idea of the nature of this examination see specimen examination questions pp. 260-262.

3. PERSONS WHO WILL NOT BE EXAMINED.

No person is eligible to an examination:

1. Who is not a citizen of the United States, and who has not been an actual resident of the City of Chicago for at least one year next preceding the date of examination; except that in special examinations for positions requiring technical, professional or scientific knowledge, or manual skill of a high order, of which public advertisement will be made, the requirement of residence in the City of Chicago may be waived;
2. Who is not within the age limitations prescribed for the examination for which he applies (see age limits, etc.);
3. Who is physically disqualified for the service which he seeks;

4. Who is addicted to the habitual use of intoxicating beverages to excess;

5. Who is enlisted in the Army or Navy, and has not secured permission for his examination from the head of the department under which he is enlisted;

6. Who has been dismissed from the public service for good cause;

7. Who failed within six months or who passed within one year in the same kind of examination for which he wishes to again apply;

8. Who has made a false statement in his application or has been guilty of fraud or deceit in any manner connected with his application or examination, or who has been guilty of crime, or infamous or notoriously disgraceful conduct.

For further information as to causes which disqualify, see Rule III.

4. AGE LIMITS.

Applicants must be not less than twenty years of age, except that, for the uniformed police force, applicants must be between twenty-one and thirty-five years of age, and firemen between twenty-one and thirty-three years, and messengers and pages seventeen years or over.

5. PHYSICAL REQUIREMENTS.

For Police, see Rule XI on page 67.

For Firemen, see Rule XII on page 67.

In addition to the physical requirements fixed in these rules for policemen and firemen, applicants must pass an examination before such physician or athletic expert as the Commission designates.

6. OBTAINING AND FILLING OUT APPLICATION BLANKS.

No person will be admitted to examination who has not previously filed an application for the particular examination which he seeks, on the official application blank which may be obtained by applying to the Commission. Each applicant must apply for his own application blank, as it is contrary to the rules of the Commission to forward blanks to one person for the use of another person.

The certificates of vouchers required in the application paper are of the utmost importance. Applicants should seek as vouchers, men who have practically known them in their callings. The certificates of gentlemen of distinction in politics are of weight only so far as they show real or close knowledge of the candidate, and the Commission's action can in no way be biased by the political influence, real or supposititious, of the signers.

Full instructions for the execution of the application will be found on the blank itself, and the applicants are cautioned to answer all questions and conform in all respects to the printed instructions. A failure to do this causes delay and annoyance.

Applicants will not be admitted to examination who have not complied with the requirements and procured admission cards or other proper authority in advance. An application will be good for only one kind of examination, and if an applicant desires to take more than one kind of examination he must file a separate application for each kind desired.

All applicants must make oath in their application to their United States citizenship. In the case of foreign-born citizens proof of citizenship must be furnished. If naturalized, a certificate of naturalization must accompany the application. A foreign-born person who claims that his parents were citizens of the United States at the time of his birth must furnish evidence in support of his claim. A foreign-born citizen who was naturalized by the naturalization of his father or his mother while he was a minor, must furnish his father's certificate of naturalization, and evidence of his identity as the child of the one whose certificate is furnished. A woman who claims naturalization through marriage to a citizen of the United States must furnish evidence of the husband's citizenship (his certificate being required if he is a naturalized citizen) and evidence of her marriage to him.

An application from a foreign-born person claiming citizenship, but failing to furnish the required proof, will be canceled. A declaration of intention to become a citizen will not be accepted in lieu of a certificate of naturalization. When naturalization papers are lost, a certificate must be procured from the court that issued the naturalization papers, showing the facts in the case.

Every applicant must make oath to the statements in his application before an officer who is authorized to administer oaths for general purposes, and the officer's signature must be authenticated by an official seal. If the officer has no official seal he must obtain

a certificate of his authority from the proper officer who has the custody of an official seal, which certificate must be attached to the paper.

Persons who have been indicted for, or convicted of any crime, must inclose with their applications a certified copy of the court proceedings showing the essential facts of the case.

All applications which show the applicants to be ineligible on any account will be canceled and retained in the files of the Commission. All applications which are defective in their execution, and can be corrected by the applicant, will be returned for correction, but an application which has been twice returned for correction and is still found to be incomplete, will be canceled.

Applications which have been approved or canceled, and all examination papers of competitors, form a part of the official records of the Commission, and cannot, under any circumstances, be returned to the applicants.

7. WHEN PERIOD OF ELIGIBILITY BEGINS AND ENDS.

The period of eligibility on all registers is two years from the date of entering the name upon the register, and the name is entered upon the register as soon as practicable after the completion of the marking of the papers.

8. WHEN RE-EXAMINATIONS ARE ALLOWED.

If not otherwise barred, persons who pass an examination may file a new application and be re-examined after one year from the date of the first examination, upon withdrawing from the register of eligibles, and persons who fail to pass may file a new application and be re-examined after six months.

9. NOTICE OF STANDING OF COMPETITORS.

A notice of standing will be sent to each person examined, whether he passes or fails to pass.

10. CHANGE OF ADDRESS.

Applicants and eligibles must keep the Commission informed of any change of post-office address. A failure to do so will be treated as the fault of the applicant or eligible, and may result in his losing an opportunity for appointment.

11. WAIVER OF CERTIFICATION.

An eligible may, upon giving to the Commission in writing satisfactory reasons, waive certification without losing his eligibility, but the period during which a name may be withheld from certification will be counted as part of the term of eligibility.

12. EFFECT OF DECLINING APPOINTMENT.

An eligible who declines an appointment tendered him will not again be certified unless he shall request in writing a further certification, stating reasons, which must be satisfactory to the Commission, for declining the appointment.

13. MEDICAL AND PHYSICAL EXAMINATIONS.

The law requires (Sec. 6) that all examinations of applicants for entrance to the Classified Service "shall include tests of physical qualifications and health."

To conduct this part of the examination a Medical Board has been organized consisting of five members, all of whom are physicians of ability and recognized standing in the profession. A majority vote of this Board is necessary to approve or to reject an applicant.

The examination in each case is with special reference to the duties of the position sought. It is most severe for entrance to the Police or Fire Department. The physical requirements for entrance to those departments will be found in Rules XI and XII.

SPECIAL INSTRUCTIONS

TO

APPLICANTS FOR POLICE AND FIRE SERVICE.

APPENDIX M.

SPECIAL INSTRUCTIONS TO APPLICANTS FOR POLICE
AND FIRE SERVICE.

The following suggestions have been prepared by the Medical Board for the assistance of applicants who are to appear before it:

IMPORTANT NOTICE.

All applicants for police or fire service must carefully follow out every detail of the following instructions. Every point stated is essential to a successful preparation for the medical and physical examination.

Candidates are first examined by a board of physicians as to their medical soundness and physical condition in general. They are next given tests of their development and strength, the nature of which will be explained in these instructions.

1. CONSULT YOUR PHYSICIAN.

Immediately consult your family physician or some reputable physician of whose ability you have positive information. First, have him measure your height and weigh you with all your clothes off, and measure the circumference of your chest, quiescent, and see if you can be included in the schedule printed in Rules XI and XII. Second, have him give you a rigid medical examination (while your clothes are still off), paying particular attention to the following: urine, teeth, venereal troubles, feet, arteries, veins, eyes, ears, voice, nose, throat, deformities, glands, family history, personal history, tumors, surgical operations, hernia, spinal cord and all the organs of the body. Your chest expansion must be at least $2\frac{1}{2}$ inches, and you must not be flat-footed or have troublesome corns or bunions. If the circumference of your abdomen exceeds that of your chest by

one inch you will not be accepted. Request him to read this paragraph as it will give him an idea of the causes of rejections. In many instances he will be able to remove many of these objections and save you the trouble of waiting six months before you can be re-examined. In no instance should you consult any other than your family physician, in case you have one, as he is always best informed regarding your peculiarities. You must be practically *perfect* physically to pass the medical examination.

POLICE SCHEDULE.

| Height. | Minimum Weight. | Maximum Weight. | *Minimum Circumference of Chest, Quiescent. |
|------------------|-----------------|-----------------|---|
| 5 feet 8 inches. | 145 pounds. | 185 pounds. | 35 inches. |
| 5 " 9 " | 150 " | 190 " | 35½ " |
| 5 " 10 " | 155 " | 195 " | 36 " |
| 5 " 11 " | 160 " | 205 " | 37 " |
| 6 " " | 165 " | 210 " | 37½ " |
| 6 " 1 " | 170 " | 215 " | 38 " |
| 6 " 2 " | 175 " | 225 " | 39 " |
| 6 " 3 " | 180 " | 230 " | 40 " |
| 6 " 4 " | 185 " | 235 " | 41 " |

FIRE SCHEDULE.

| Height. | Minimum Weight. | Maximum Weight. | *Minimum Circumference of Chest, Quiescent. |
|------------------|-----------------|-----------------|---|
| 5 feet 7 inches. | 140 pounds. | 180 pounds. | 34 inches. |
| 5 " 8 " | 145 " | 185 " | 35 " |
| 5 " 9 " | 150 " | 190 " | 35½ " |
| 5 " 10 " | 155 " | 195 " | 36 " |
| 5 " 11 " | 160 " | 200 " | 37 " |
| 6 " " | 165 " | 210 " | 37½ " |
| 6 " 1 " | 170 " | 215 " | 38 " |
| 6 " 2 " | 175 " | 225 " | 39 " |
| 6 " 3 " | 180 " | 230 " | 40 " |
| 6 " 4 " | 185 " | 235 " | 41 " |

*NOTE.—A modification of the chest measurement required in this schedule may be allowed as follows:

To an applicant whose height is between five feet nine inches and six feet, a reduction of one inch or any fraction thereof.

To an applicant whose height is six feet or over, a reduction of one and one-half inches or any fraction thereof.

Provided, that in each case the applicant shall have a chest expansion of three inches or more.

2. HABITS.

If you are in the habit of using liquor, or tobacco in any way, except in the greatest moderation, you must immediately become moderate in these habits. Any excess in either habit, in almost all

cases, produces an abnormally rapid or irregular pulse, which is a very common cause of rejection. Tobacco and liquor both tend to lower the vigor of your muscular condition, and thus your average in tests of strength would be materially reduced. Morphine and cocaine habits and over-indulgence in liquors are easily detected and will cause permanent rejection.

3. REGARDING DEVELOPMENT TESTS.

You will be subjected to a test of your development, *i. e.*, your figure, its symmetry and probable power. If you have an excess of fatty tissue in any part of the body, it will lower your percentage very greatly. Your physician will advise you how to remove this unnecessary fat. If you could enter a gymnasium it would be the quickest and most perfect method for such removal.

4. TESTS OF STRENGTH.

You will be subjected to the following tests of strength: Grip, pushing, pulling, lifting, squeezing with legs, putting up dumb bells; lying on floor, feet held, and coming to sitting posture, with dumb bells of various weights held behind head; "chinning" on ladder; "dipping" between parallel bars, running, high jumping, and in case of firemen climbing slanting ladders with hands only, and in like manner on a suspended sagging rope. To accomplish best results with these tests you should exercise in the early morning and evening, either in a gymnasium or some other suitable place. These tests are entirely free from any "knack" or "trickery." They are fair, honest tests of the strength of all the muscles in your body; hence, develop your entire muscular system. Secure your physician's advice as to the proper number of hours per day for this work, as well as the best methods, etc.

5. LUNG TESTS.

The strength of your chest muscles and the capacity of your lungs are also tested. To accomplish the best results in these tests, you should practice taking in slow deep breaths in the open air, with your head and shoulders thrown back and body erect. Practice this at least thirty times each day, taking at least ten deep breaths at a time. This method will add very greatly to your general vigor and health.

6. TEMPORARY ILLNESS ON DAY SET FOR PHYSICAL EXAMINATION.

If, for any reason, you find yourself with fever or any other temporary ill-health on the day set for your examination, do not attempt to take the examination, for such condition would materially lower your percentage, and might cause your rejection; but notify the secretary of the Medical Board of your illness and he will enter you at the next examination.

7. DANGER OF ANY MISREPRESENTATION REGARDING YOUR HISTORY AND HEALTH.

You are required to take oath before a notary public in the examination room that all your answers to questions regarding family (health) history and your own health, past and present shall be truthful. Hence, any attempt at deceit will be perjury, and, if detected, will be rigidly prosecuted.

8. EFFORTS TO UNDULY INFLUENCE THE MEDICAL OR PHYSICAL EXAMINERS.

Any letters presented by you or by any other individual, from any person or persons, or any interview solicited by yourself or any person or persons in your behalf, will be considered sufficient cause for an unfavorable opinion of your integrity, and your name will be added to a list of permanent ineligible, making it impossible for you to ever be examined by any board of the Chicago Civil Service Commission.

9. INFORMATION—HOW OBTAINABLE—WHEN TO RETURN APPLICATIONS.

The secretary and physical examiner of the Medical Board can be found in the offices of the Commission each week day from 12 to 1 o'clock. Suitable questions will be answered by him at this time.

Applications must also be returned at this hour in order that your conformity to the schedules of height, weight, and chest circumference may be tested. You must not seek information from any examiner at any other time or place.

10. DIET, ETC., ON DAY OF EXAMINATION.

Take no stimulants stronger than a cup of coffee in the morning and at noon. Whisky, beer or other liquors not only lessen your chances in the severe muscular tests of the day, but create a bad impression of your habits. The physical examiner has very commonly seen men of normally excellent physical strength fail in the examination owing to bad influence of liquor on their muscular power. The impression that stimulants of this kind will improve your strength is a wrong one and must be guarded against. Take a light meal at least three hours before the time set for examination that digestion may be completed before your appearance.

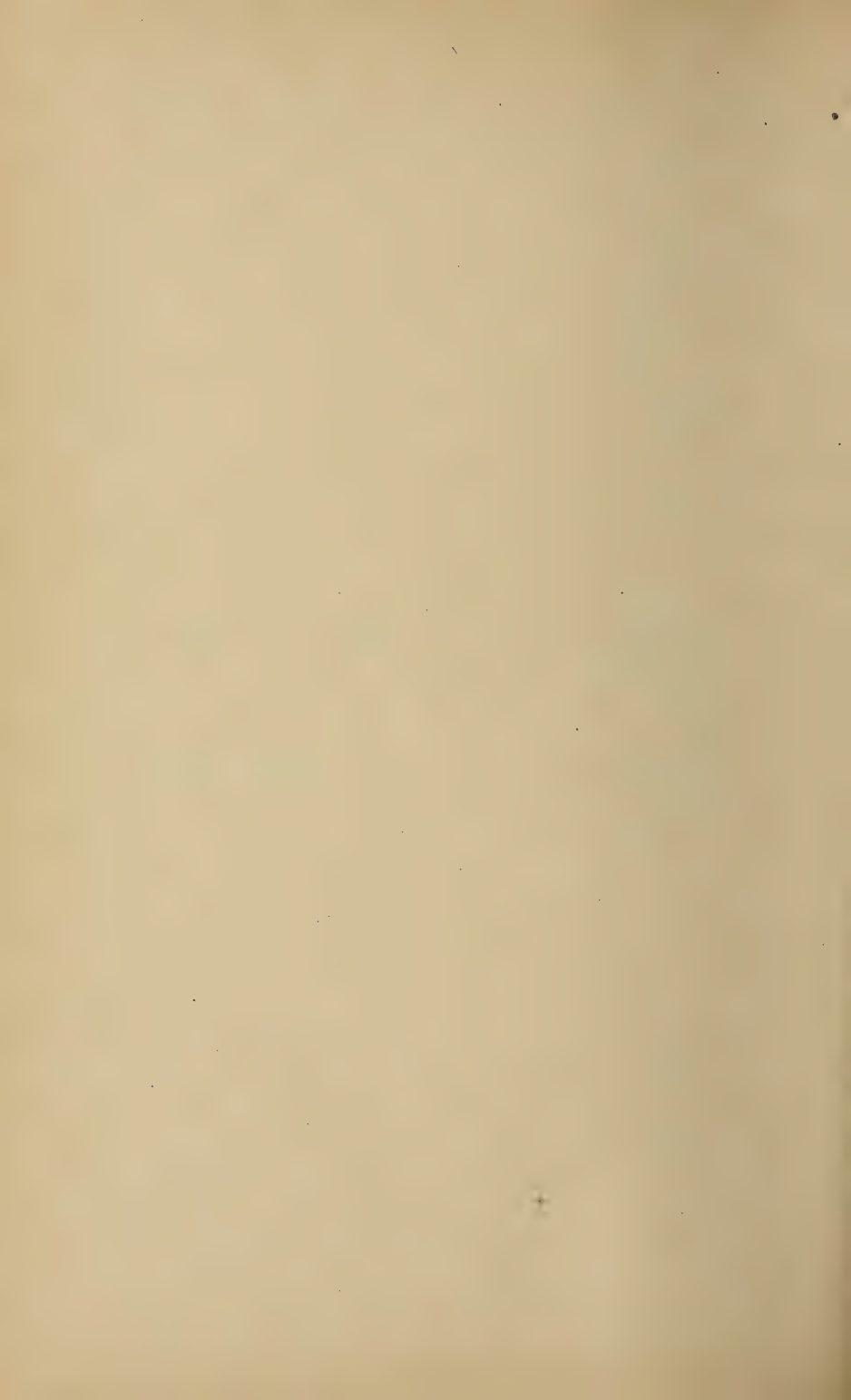
11. RE-EXAMINATIONS—TEMPORARY REJECTIONS.

Rejected candidates who appear in person at the Civil Service rooms can learn the cause of their rejection from the secretary of the Medical Board. All candidates rejected by the Medical Board will be given ten days from the date of original examination in which to file requests for re-examination. No such request will be received unless presented to the secretary of the Medical Board at the time and place stated in instruction nine, and accompanied by a certificate signed by a reputable physician, which certificate denies the existence of the cause for rejection, as decided by the Medical Board. The secretary will notify the rejected candidate on what day during the ten days he can appear before the Medical Board. After the ten days have expired the eligible lists will be published and no protest or complaint will be recognized. The eligible lists cannot be changed after they are once published. Candidates presenting causes for rejection which are apparently temporary or easily removed, will be given ten days after original examination to remove such condition, and will be notified by mail of the time and place to appear before the Medical Board for final examination.

12. EXAMINERS NOT TO TREAT APPLICANTS.

No member of the Medical Examining Board will treat any applicant for any position obtainable under the rules of the Chicago Civil Service Commission. Rejected candidates are included in this rule.

CAUSES FOR REJECTION
BY
MEDICAL BOARD FOR 1896.



APPENDIX N.

CAUSES FOR REJECTION BY MEDICAL BOARD.

If a candidate is afflicted with any disease or condition named in these standards which in all probability could be removed, his examination is postponed 10 days.

FIRST CLASS.

FIRE DEPARTMENT—PIPEMEN, TRUCKMEN AND DRIVERS.

POLICE DEPARTMENT—PATROLMEN AND DRIVERS.

I. Eyes.—Color blindness in police or fire drivers. Error or errors of refraction. Inflammatory diseases and their sequences, of the eye and its appendages (such mild diseases as trachoma, ophthalmia tarsi, and mildly chronic conjunctivitis cause temporary rejection). Strabismus. Cataract of any degree. Nebulæ, if vision is impaired. Ptosis. Distichiasis. Entropion. Ectropion and diseases or deformities of the lachrymal apparatus. Glaucoma, diseases of optic nerve and retina. New growths of eye and its appendages, unless of harmless character. Diseases of vitreous body. Lagophthalmos. Wounds of orbit, or of apparatus, which interfere with its integrity.

II. Ears.—Eczema of auditory canal or meatus. Shrinking of cartilage of same. Inflammation extensive. Bony growths. Fungi. Polypi. Perforation of drum head. Discharge from ear. Impaired hearing. Demonstrable disease of middle and internal ear, including mastoid disease.

III. Voice.—Any impairment, which would interfere with the usefulness of candidate in duties of position sought.

IV. Deformities.—Any congenital or acquired deformity of bone or other tissue which could injure the health or usefulness of candi-

dates. This includes such conditions as impaired mobility in joints; contracted tendon; crooked toes with corns or inflammation; genu valgus and varus; flat foot. Only extreme cases of flat feet will reject patrol and fire drivers, pipemen, and truckmen in fire department. The mildest type of uncomplicated non-inflammatory spinal curvature will not reject.

V. Tissues.—Osseous, ligamentary, voluntary muscular, integumentary and subcutaneous. Skin: Any contagious disease, or any other diseases which would impair usefulness of applicant or produce deformity. The latter cause also applies to other tissues named, viz.: Rheumatic, tubercular, syphilitic or other inflammation of bone or membrane. Caries. Necrosis. Exostoses except mildest type. Degeneration. Infiltration. Abscess of any character except such a mild condition as single furuncle. Rupture or hernia of muscle. New growths. Malformations. Hypertrophy. Atrophy. Myositis. Idiopathic muscular atrophy. *Inflamed and multiple* corns and bunions. Floating cartilage in joint. Cicatrices which impair usefulness or health of applicant.

VI. Nervous System.—(1) *Cerebral*. (a) *Organic*: Hyperæmia. Anæmia. Meningitis. Hydrocephalus. Abscesses. Softening. Sclerosis. Hemorrhage. Thrombosis. Embolism. Tumors. Aneurisms. Glosso-labio-laryngeal paralysis. Syphilis. (b) *Functional*: Insanity. Headache. Idiocy. (2) *Cerebro-Spinal*. (a) *Organic*: Cerebro-spinal meningitis. Disseminated cerebro-spinal sclerosis. Paralysis agitans. (b) *Functional*: Occupation neuroses. Epilepsy. Catalepsy. Chorea. Hysteria. Neurasthenia. (3) *Spinal*. (a) *Organic*: Hyperæmia. Anæmia. Meningitis. Myelitis. Softening. Sclerosis. Atrophy. Locomotor ataxia. Hereditary ataxia. Spastic paraplegia. Ataxic paraplegia. Spinal apoplexy. Tumors. Syringo-myelia. Syphilis. Progressive muscular atrophy. (b) *Functional*: Spinal irritation. Tremors. Reflex spasms due to cord irritation. Acute ascending paralysis. Myotonia. (4) *Nerves*. Neuralgia. Degeneration. Sciatica. Inflammation. Irritation. Tumors. (5) *Sympathetic Nervous System*. Any demonstrable intrinsic change including those disorders either wholly or in part caused by these changes, viz.: Convulsions, migraine, exophthalmic goitre, unilateral hyperidrosis, progressive facial hemiatrophy, neuralgia. Addison's disease. Asthma. Diabetes mellitus. Epilepsy.

VII. Respiratory System.—Hypertrophic rhinitis, exostoses. Benign tumors or defected septum which are sufficient to prevent independent respiration, through either nostril. Rhinitis, nasopharyngitis, pharyngitis and chronic tonsillitis, except mildest types without history of acute exacerbation. New growths in or below the naso-pharynx. Markedly elongated uvula with pharyngitis or tonsillitis. Tubercular, syphilitic, or malignant diseases of air passages. Any disease of respiratory apparatus below epiglottis including pleuritic diseases. "Tubercular chest" or any deformity of thorax which interferes with respiratory excursion of one or both sides or prevents chest expansion of $2\frac{1}{2}$ inches. Hay fever. Asthma.

VIII. Digestive System.—Loss of nine (9) teeth or more or any condition of teeth which would prevent mastication, unless false teeth can be used and candidate secures them at once. Stomatitis. New growths. Cancrum oris of severe type or any other demonstrable disease of organs including salivary glands, liver, spleen, pancreas, peritoneum. Appendicitis. Hernia of any degree. Internal hemorrhoids. External hemorrhoids unless of mild type and uncomplicated. Anal fissures except mildest types, and fistula. Pendulous or obese abdomen exceeding depth or circumference of chest by $\frac{3}{4}$ of an inch. A thin and flabby abdominal wall. Ascites.

IX. Circulatory System.—Any organic diseases of the heart or its blood vessels or pericardium. Functional diseases of the heart, viz.: Bradycardia. Arrhythmia. Tachycardia. Thrombosis and embolism. Inflammation. Degeneration, ulceration. Dilatation. Veins: Phlebitis and varicose veins, except of mildest types. Angioma except mildest type.

X. Lymphatic System.—Lymphangitis. Chronic inflammation. Glandular hypertrophy, when cause is apparent or when generalized or degenerative. Marked formation and deposits in glands, viz.: Cancer, sarcoma, syphilis, tubercle, chronic changes in lymphatic vessels, viz.: Dilatation, hypertrophy, lymphangiectasis, obstruction.

XI. Genito-Urinary System.—Phimosi. Paraphimosis. Malformation and injuries which would interfere with the health of a candidate. Erysipelas. Gangrene. Epithelioma. Elephantiasis. Balanitis. Inflammation and gummata of corpora cavernosa.

Urethral neoplasm, abscesses, ulceration, fistula and urethritis. Urethral, vesical, ureteral, prostatic or pelvic calculi. Extreme varicocele, hydrocele. Epididymitis, orchitis, fungus, enchondroma, cancer, sarcoma, fibroid tumors. Extreme atrophy. Tuberculosis. Syphilis. Hematocele. Eczema. Pediculosis. Molluscum contagiosum. Cystic tumors if severe type. Hematoma. Angioma. Epithelioma. Tuberculosis.

Bladder.—Cystitis. New growths. Dilatation. Calculus. Tuberculosis. Incontinence. Pyuria.

Kidney.—Inflammatory and degenerative diseases including perinephritis, abscess, cysts, calculus, congestion. Floating kidney. Neoplasm. Tubercle. Syphilomata.

Urine.—Albuminuria without casts which persists after second examination. In all cases urine must be examined by two members of the Board when it is abnormal, viz.: Albumin, sugar, bile pigment, casts, pus. Specific gravity persistently over 1030 or under 1010.

XII. Miscellaneous Diseases and Conditions.—Angina pectoris. Rheumatism. Syphilis. Malaria. Gout. Fever 100 degrees F. or over. Jaundice hæmatogenous or hepatogenous. Diabetes insipidus or mellitus. Alcoholism, anasarca. Gallstones. Anæmia, leucocythemia. Hodgkins' disease. Goitre. Myoidema. Malignant tumor. Obesity. Morphia or any other drug habit. Parasitic diseases. Malaria. Mediastinal diseases. Arthritis deformans. Evidence of rickets. Scurvy. Cachexia. Insufficient strength or development. Unclean person, unless properly explained. Any contagious disease.

Deviation from these standards will be permitted when the condition is of minor importance and the applicant presents unusual physical development and strength. After applicants (all clothes removed) have been examined and passed by the Board, they will be given a percentage for "physical condition," determined by a series of development and strength tests called the "Brown System" (see report of Physical Examiners).

SECOND CLASS.

The various inspectors in the Health Department, including fumigators.

Causes for rejection shall be the same as in the First Class, with the following exceptions: (The standards for these inspectors are more severe than for the other inspectors, owing to their frequent contact with contagious diseases and unsanitary environments. Smoke and milk inspectors are not examined as closely as the others.)

I. Errors of refraction, if properly corrected. Inflammatory diseases and sequences, unless sufficient to impair or endanger vision. Strabismus and other muscular defects, if visional power is normal. Ptosis, unless marked or due to lesions of the third nerve.

II. All diseases of external ear, unless sufficient to impair hearing, except extensive chronic eczema or inflammation of auditory canal.

IV. First clause only to be observed, e. g.: Flat foot, unless of severest type, or loss of one arm would not reject.

V. Benign tumors, without pressure symptoms, degeneration or deformity. Rupture or hernia of muscle, corns, bunions and exostoses, unless of severest type.

VI. Loss of teeth, unless sufficient to impair digestion and candidate refuses to secure false ones. Cancrum oris. Herniae, if well fitting truss is worn, unless inflamed, irreducible or otherwise complicated. External hemorrhoids and anal fissures, unless of severe type. Pendulous or obese abdomen, unless its circumference or depth exceeds that of the chest by five inches.

IX. Uncomplicated hypertrophy of left ventricle. Compensated defects of mitral orifice, unless there is evidence of recurrent attacks of rheumatism, or marked enlargement of heart cavities. Only severest types of functional heart disease. Same of angioma. Varicose veins, unless severe on both legs, or if they have ruptured or caused ulceration.

X. Dilatation and hypertrophy of lymphatics.

XI. Phimosi and para phimosi, elephantiasis, varicocele and hydrocele, unless of severe type or complicated. Floating kidney.

XII. Obesity must be well marked to reject. Physical strength must be adequate to the duties of the position sought. Senility will reject. The schedules for height, weight and chest are not used.

THIRD CLASS.

Stationary engineers, firemen, guards at House of Correction, watchmen and cribmen.

Causes for rejection are the same as in the Second Class, with the following exceptions:

- I. Errors of refraction. Ptoxis.
- IV. Same as in the First Class for fire service.
- V. Rupture or hernia of muscle. Corns and bunions, unless single and not inflamed.
- VIII. Complete hernia of any type will reject. If abdomen exceeds girth or depth of chest by three inches it will reject.
- IX. Cardiac hypertrophy and mitral defects. Varicose veins.
- X. Floating kidney.
- XII. Obesity.

FOURTH CLASS.

Civil engineers and rodmen, mechanical engineers, milk testers, inspectors and foremen in the Department of Public Works, bacteriologists, chemists, and members of the electrical service, the library service and the clerical service.

Causes for Rejection: The examination is confined to the chest and exposed parts of the body, except when the indications are presented which suggest disability elsewhere, when the examination is extended. Female candidates are never examined beyond the chest and exposed parts and the invention of the phonendoscope allows this to be done through the dress in nearly every case. In general the standards for the Second Class are used, with the general exception that the cause must be sufficient, in all probability, to impair applicant's immediate usefulness, prevent regular attendance at work, or incapacitate at some future date; e.g.: Only severest types of disease of respiratory passages above larynx, unless there is evidence of acute exacerbations. Alcoholism. Contagious skin or other diseases cause rejection.

FIFTH CLASS.

Police matrons.

Causes for rejection shall be the same as for the First Class, except the schedule for height, weight and chest circumference. These standards must bear a proper relation to each other and to physical strength, which must be well developed. The examination will be confined to chest and exposed parts, unless evidence is presented of other disability. If gynecological examination is necessary, candidate can elect to have it performed by a member of the Board or a female physician.

Additional Causes for Rejection: Menopause, marked diastasis of recti muscles. Mastitis. New growth or evidence of removal for malignancy of mammary glands. Any disease or condition of pelvic organs or tissues sufficient to impair health, present or future. History of menstrual disorders or repeated miscarriages.

SIXTH CLASS.

Unskilled labor, except cribmen, skilled labor, and janitor service.

Causes for rejection: Examinations shall be confined to exposed parts of body and to the chest, except when further examination is indicated. In general the standards for Second Class will be applied with the following exceptions:

IV. The same as in Third Class.

V. Rupture or hernia of muscle unless mild.

VII. Catarrhal diseases or new growths (benign) of upper respiratory passages, unless sufficient to impair health.

VIII. Hernia, unless of mildest types with well fitting truss worn. Relation of abdomen to chest same as in Third Class.

IX. Same as in Third Class.

XII. Same as in Third Class.

Candidates for labor service, who are not rejected for above causes, are given a percentage for physical condition determined from a series of percentages which are given for the following: Relation of height to weight; chest, its expansion and size; muscular condition; and general physical appearance.

PROMOTIONAL EXAMINATIONS.

Candidates are rejected who have a disease or disability sufficient to incapacitate them immediately or within a year's time. If the disease is contagious it will be reported to the head of the department in which candidate is employed. If the disability or disease is due to exposure or accident brought about by the duties of the present position, it shall not prevent promotion, unless sufficient to immediately and permanently incapacitate the candidate.

Fifty-eight candidates for promotion have been examined medically this year. Thirty-three were candidates for promotion in the Fire Department, viz.: Seven for first class captains; four for operators; five for assistant operators; seventeen for assistant engineers. Twenty were candidates for promotion in clerical service, viz.: Three clerks in Police Department; seventeen clerks in other branches of the official service. Five were candidates for promotion to the position of mechanical engineer. All of the fifty-eight were passed medically.

CAUSES FOR REJECTION BY MEDICAL BOARD FOR 1896.

(ORIGINAL ENTRANCE.)

- I. Patrolmen, Patrol Drivers, and Fire Department Drivers.
 II. Skilled and Unskilled Labor (except those named below), also Janitors, Janitresses, and Elevator Men.
 III. Other Branches of Official Service:
 (Assistant) Bacteriologists, (Assistant) Chemists, Fumigators, Guards at House of Correction, Inspectors in Health Department, Watchmen, and Division B (Civil Engineering), Division C (Clerical), Division E (Electrical), Division G (Mechanical Engineering), Division I (Inspection, Department of Public Works), and Division K (Library), also
 Stationary Firemen, (Labor Service).
 IV. Totals.

| | | I. | II. | III. | IV. |
|-----------------------------------|---|-------|-------|-------|-----|
| WEIGHT. | Under weight..... | 130 | ..... | ..... | 130 |
| | Over weight..... | 18 | ..... | ..... | 18 |
| | Over weight and obesity..... | 41 | ..... | ..... | 41 |
| | Obesity..... | | 7 | 2 | 9 |
| UNDER HEIGHT. | | 77 | ..... | ..... | 77 |
| CHEST. | Under schedule | 179 | ..... | ..... | 179 |
| | Tubercular..... | 14 | 4 | 2 | 20 |
| | Rachitic..... | 3 | 6 | ..... | 9 |
| | Deficient expansion (i. e. under 2½") | 16 | ..... | ..... | 16 |
| FEET. | Flat, { one foot..... | 7 | ..... | ..... | 7 |
| | { both feet..... | 131 | ..... | ..... | 131 |
| | Toes deformed and inflamed..... | 14 | ..... | ..... | 14 |
| | Multiple inflamed corns and bunions..... | 23 | ..... | ..... | 23 |
| | Ingrowing nails..... | 3 | ..... | ..... | 3 |
| SPINAL CURVATURE. | Scoliosis dextra..... | 23 | ..... | ..... | 23 |
| | Scoliosis sinistra..... | 10 | ..... | ..... | 10 |
| | Kyphosis..... | 14 | ..... | ..... | 14 |
| | Lordosis..... | 2 | ..... | ..... | 2 |
| FUNCTIONAL HEART DISEASES. | Tachycardia..... | 70 | 6 | 2 | 78 |
| | Arrhythmia..... | 31 | 1 | 5 | 37 |
| | Bradycardia..... | 2 | 2 | ..... | 4 |
| ORGANIC HEART DISEASES. | Hypertrophy..... | 19 | ..... | 1 | 20 |
| | Dilatation..... | 14 | 5 | 2 | 21 |
| | Mitral insufficiency..... | 28 | 14 | 8 | 50 |
| | Mitral stenosis..... | 9 | 3 | 4 | 16 |
| | Aortic insufficiency..... | 19 | 3 | 2 | 24 |
| | Aortic stenosis..... | 8 | 3 | 1 | 12 |
| | Fatty infiltration..... | 12 | 5 | 3 | 20 |
| | Fatty degeneration..... | 5 | 4 | 2 | 11 |
| ARTERIES. | Arterio sclerosis..... | 7 | 30 | 12 | 49 |
| | Aneurism aortic..... | 2 | ..... | ..... | 2 |
| VEINS. | External piles..... | 28 | ..... | ..... | 28 |
| | Internal and external piles..... | 16 | 4 | 2 | 22 |
| | Varicose—one leg..... | 57 | ..... | ..... | 57 |
| | Varicose—both legs..... | 72 | 3 | ..... | 75 |
| | Phleboliths..... | 2 | ..... | ..... | 2 |
| DISEASES OF RESPIRATORY PASSAGES. | Lungs. { Tuberculosis..... | 12 | 4 | 8 | 24 |
| | { Bronchitis (acute)..... | 2 | ..... | ..... | 2 |
| | { Bronchitis (chronic)..... | 6 | ..... | 1 | 7 |
| | { Emphysema..... | 3 | 4 | 3 | 10 |
| | Pleurisy (adhesive)..... | 2 | ..... | ..... | 2 |
| | Laryngitis..... | 7 | ..... | ..... | 7 |
| | Tonsillitis and pharyngitis..... | 14 | ..... | 3 | 17 |
| | Rhinitis (hypertrophic)..... | 13 | ..... | ..... | 13 |
| | Rhinitis (atrophic)..... | 2 | ..... | ..... | 2 |
| KIDNEY. | Chr. Parenchymatous nephritis..... | 7 | ..... | ..... | 7 |
| | Chr. Interstitial nephritis..... | 4 | 1 | 3 | 8 |
| HERNIA. | Right inguinal complete..... | 4 | 3 | ..... | 7 |
| | Left inguinal incomplete..... | 4 | ..... | ..... | 4 |
| | Left inguinal complete..... | 7 | ..... | ..... | 7 |
| | Double inguinal complete..... | ..... | 2 | ..... | 2 |
| | Umbilical..... | 15 | 1 | ..... | 16 |

CAUSES FOR REJECTION BY MEDICAL BOARD. 121

| | | I. | II. | III. | IV. |
|----------------|---|-------|-------|-------|------|
| EYE. | Myopia..... | 19 | 3 | 2 | 24 |
| | Hypermetroplia..... | 4 | 7 | 6 | 17 |
| | Corneal opacity..... | 3 | 2 | ..... | 5 |
| | Conjunctivitis (chronic)..... | 5 | 3 | 2 | 10 |
| | Ectropion..... | 2 | ..... | ..... | 2 |
| | Strabismus..... | 10 | ..... | ..... | 10 |
| | Hyperphoria..... | 2 | ..... | ..... | 2 |
| | Pterygium..... | 2 | ..... | ..... | 2 |
| | Iritis..... | 3 | ..... | 3 | 6 |
| | Double cataract..... | ..... | 2 | ..... | 2 |
| SKIN. | Syphilis..... | 20 | 7 | 6 | 33 |
| | Acne. Rosac. Pust. Vulg..... | 8 | ..... | ..... | 8 |
| | Eczema (chronic)..... | 4 | ..... | ..... | 4 |
| | Psoriasis..... | 2 | ..... | ..... | 2 |
| | Lupus erythematosus..... | 1 | ..... | ..... | 1 |
| | Erysipelas..... | ..... | ..... | 1 | 1 |
| GENITALS. | Gonorrhœa (acute)..... | 4 | ..... | ..... | 4 |
| | Gonorrhœa (chronic)..... | 7 | ..... | ..... | 7 |
| | Chancroids..... | 4 | ..... | ..... | 4 |
| | Extreme varicocele..... | 16 | ..... | ..... | 16 |
| | Extreme hydrocele cord..... | 3 | ..... | ..... | 3 |
| | Phimosis..... | 3 | ..... | ..... | 3 |
| TUMORS. | Lipomata..... | 5 | ..... | ..... | 5 |
| | Cystic..... | 2 | ..... | ..... | 2 |
| | Angiomata..... | 2 | ..... | ..... | 2 |
| BONES. | Genu valgus extreme..... | 6 | ..... | ..... | 6 |
| | Genu varus extreme..... | 11 | ..... | ..... | 11 |
| | Deformed (gun shot wounds) tibia..... | 1 | ..... | ..... | 1 |
| | Deformed (fracture) tibia..... | 2 | ..... | ..... | 2 |
| | Perlostitis..... | 1 | ..... | ..... | 1 |
| ALCOHOLISM. | Chronic..... | 34 | 6 | 7 | 47 |
| | Acute..... | 6 | 1 | ..... | 7 |
| TREMOR. | Coarse..... | 11 | 10 | 2 | 23 |
| | Fine..... | 4 | 2 | ..... | 6 |
| MUSCLES. | Deficient strength..... | 41 | 12 | 4 | 57 |
| | Hernia..... | 1 | ..... | ..... | 1 |
| | Rupture..... | 1 | ..... | ..... | 1 |
| ABDOMEN. | Excessive..... | 44 | ..... | ..... | 44 |
| | Relaxed and flabby..... | 2 | ..... | ..... | 2 |
| TEETH. | Loss of nine or more and others decayed... .. | 14 | ..... | ..... | 14 |
| | Loss under nine and all decayed..... | 3 | ..... | ..... | 3 |
| EARS. | Impaired hearing in one ear..... | 8 | ..... | ..... | 8 |
| | Impaired hearing in both ears..... | 4 | ..... | ..... | 4 |
| MISCELLANEOUS. | Inflammation of bladder..... | 2 | ..... | ..... | 2 |
| | Anæmia..... | 5 | 3 | 3 | 11 |
| | Dropsy legs..... | 7 | ..... | ..... | 7 |
| | Arthritis..... | 2 | ..... | 1 | 3 |
| | Arthritis rheumatic..... | ..... | 4 | ..... | 4 |
| | Filthy person..... | 3 | ..... | ..... | 3 |
| | Loss of fingers..... | 2 | ..... | ..... | 2 |
| | Loss of one leg..... | ..... | 2 | ..... | 2 |
| | Goitre..... | 1 | 1 | ..... | 2 |
| | Persistent fever, over 100° F..... | 2 | ..... | ..... | 2 |
| | Locomotor ataxia..... | ..... | 2 | 1 | 3 |
| | Senility..... | ..... | 12 | 4 | 16 |
| SUMMARY. | Original Entrance, { examined..... | 1207 | 1953 | 364 | 3524 |
| | { passed..... | 339 | 1859 | 319 | 2517 |
| | { per cent..... | 28% | 95% | 88% | 71% |
| | Promotion, (examined and passed)..... | 36 | ..... | 22 | 58 |
| | Totals, { examined..... | 1243 | 1953 | 386 | 3582 |
| | { passed..... | 375 | 1859 | 341 | 2575 |
| | { per cent..... | 30% | 95% | 88% | 72% |

MINUTES OF MEETINGS

OF THE

CIVIL SERVICE COMMISSION OF CHICAGO.

APPENDIX O.

MINUTES OF MEETINGS OF THE CIVIL SERVICE
COMMISSION OF CHICAGO.

January 6, 1896.

The Civil Service Commission of Chicago met in its office, room 115, City Hall, on Monday, January 6th, 1896, at eleven thirty o'clock A.M. There were present Commissioners John M. Clark and Christoph Hotz (absent Commissioner Waller), the President in the chair.

The reading of the minutes of the last meeting was dispensed with.

The Secretary presented the case of James M. Graham who, after examination, had been certified to the Police Department and assigned, on probation, to duty as patrolman.

Charges of being absent from duty without permission had been preferred against him, and as the result of a hearing by the Board appointed to conduct such investigation in the Department of Police, his discharge from the force was recommended.

On invitation of the Commission Mr. Graham appeared before it and was given full opportunity to be heard in his defense. He admitted the truth of the charges made, but pleaded illness as an excuse. He also admitted having taken several drinks during that evening which he thought, in connection with the medicine he had taken, was accountable for his actions. In the opinion of the Commission, the charges against him were fully sustained, and on motion of Commissioner Hotz it was ordered that the Commission approve his discharge from the force. The Secretary was instructed to certify the same to the Superintendent of Police.

The following estimate of the appropriation required by the Commission for the ensuing fiscal year was submitted to the City Comptroller January 3rd:

"Hon. O. D. WETHERELL,

Comptroller, City of Chicago, Ill.,

"Sir:—I have the honor to present herewith an estimate of the requirements of the Civil Service Commission of Chicago for the ensuing fiscal year:

| | | |
|---|-------------|-------------|
| Official salaries, three Commissioners and the Secretary (fixed by statute)..... | \$12,000 00 | |
| Chief Medical Examiner..... | 1,500 00 | |
| 15 Examiners..... | 15,500 00 | |
| 5 Members of Trial Boards..... | 4,650 00 | |
| | | \$33,650 00 |
| 1 Chief Clerk..... | \$1,500 00 | |
| 1 Clerk..... | 1,000 00 | |
| 1 "..... | 900 00 | |
| 1 "..... | 800 00 | |
| 1 Stenographer..... | 720 00 | |
| 1 Messenger..... | 420 00 | |
| | | 5,340 00 |
| Stationery..... | \$ 500 00 | |
| Postage..... | 900 00 | |
| Printing..... | 4,800 00 | |
| Advertising..... | 450 00 | |
| Blank books..... | 200 00 | |
| Official blanks..... | 500 00 | |
| Office furniture..... | 800 00 | |
| Incidentals..... | 900 00 | |
| | | 9,050 00 |
| Total..... | | \$48,040 00 |

"The Commission will be glad to appear before you at any time that you may designate to give information as to any of the items in the above estimate. Very truly,

(Signed) JOHN M. CLARK,
President."

The Secretary reported that he was employing the whole of the office force and the Board of Markers in completing the papers of examinations already held, and tabulating the results to form part of the report which the law requires shall be made to His Honor the Mayor, for the use of the Council, on or before January 15th.

He also asked authority to add the names of James S. Rogers, 5535 Monroe avenue, and Miss Elizabeth Rowe, 511 Fullerton avenue, to the force for temporary service, should it be found necessary to utilize them to enable him to get the work done in time.

On motion of Commissioner Hotz the authority asked for was granted.

There being no further business, the meeting then adjourned.

EDWARD J. PHELPS,
Secretary.

JOHN M. CLARK,
President.

January 14, 1896.

A meeting of the Civil Service Commission of Chicago was held in its office, room 115, City Hall, on Tuesday, January 14th, 1896, at eleven o'clock A. M. There were present Commissioners John M. Clark, R. A. Waller and Christoph Hotz, the President in the chair.

The minutes of the last meeting were read and approved.

The law requires that the Commission shall, on or before the 15th day of January in each year, prepare and submit to the Mayor, for transmission to the Council, a report showing its official actions, the rules in force, suggestions, etc.

In compliance with this provision, a full report covering the time from the appointment of the Commission to December 31st, 1895, had been prepared, which after having been carefully read and considered by the Commission, was adopted.

The President and Commissioner Waller took the report to the Mayor's office on this, the 14th day of January, 1896, and personally submitted it to him. After looking it over the Mayor stated that he was about leaving the city to be absent for ten days and he requested that the Commission take the report and have it properly printed in order that he might transmit it in print to the Council. He expressed the wish that the report might be printed and ready for transmission by the time of his return.

In accordance with this request, the Commission, on motion of Commissioner Waller, instructed the Secretary to at once obtain bids for printing the report.

There being no further business, the meeting then adjourned.

EDWARD J. PHELPS,
Secretary.

JOHN M. CLARK,
President.

January 27, 1896.

The Civil Service Commission of Chicago met in its office, room 115, City Hall, on Monday, January 27th, 1896, at eleven o'clock A. M. There were present Commissioners John M. Clark and Christoph Hotz (absent Commissioner R. A. Waller), the President in the chair.

The Secretary reported that he had invited the following firms to make bids for printing the annual report:

George E. Marshall & Company,
S. D. Childs & Company,
P. F. Pettibone & Company, and
Cameron, Amberg & Company.

In order to comply with the request of the Mayor that the annual report of the Commission be ready for transmission to the Council on his return from the South, a limited time for completing the work had been specified by the Secretary in writing the proposals. Several of the firms stated that on account of the work they already had in hand they were not in a position to submit bids. But one bid was received, that of P. F. Pettibone & Company for \$242.00.

To have invited further bids would have consumed time and the bid of Pettibone & Company being very low, on motion of Commissioner Hotz it was ordered that the contract be awarded to Pettibone & Company at their bid in order that the work might be begun without delay.

On motion of Commissioner Hotz it was ordered that an examination for assistant chemist be called for Wednesday, February 12th, and the Secretary was instructed to cause the following advertisement to be made touching the same:

"An examination for the position of assistant chemist in the Classified Service of the City of Chicago will be held on Wednesday, February 12th, at 10:30 A. M., in the Council Chamber at the City Hall.

"In view of the fact that at a recent examination for this position only two candidates presented themselves, and as the position requires special technical and scientific knowledge, therefore, under the provisions of Section 3, Rule II, the limitation of residence in the City of Chicago will be waived, and the examination will be open to all citizens of the State of Illinois.

(Signed) EDWARD J. PHELPS,

Chicago, January 28, 1896.

Secretary."

Commissioner Hotz moved that Prof. Romyn Hitchcock be invited to act with Dr. Kennicott, City Chemist, and Examiner Gamble, as a board for marking the papers of the said examination. The motion was carried.

The following bills for salaries and expenses for the month were presented, audited, and ordered sent to the Comptroller for payment:

| | |
|--|-------------------|
| Cameron, Amberg & Co., Stationery..... | \$ 3 75. |
| Cameron, Amberg & Co., Stationery..... | 4 18. |
| Waukesha Spring Water | 3 75. |
| Cameron, Amberg & Co..... | 22 75. |
| Cameron, Amberg & Co..... | 15. |
| Chicago Dispatch, Advertising..... | 4 32. |
| Cameron, Amberg & Co., Stationery..... | 4 00. |
| Cameron, Amberg & Co., Mimeograph..... | 15 00. |
| Pay Roll for January..... | 2,296 66. |
| Cameron, Amberg & Co..... | 9 26. |
| Cameron, Amberg & Co..... | 2 50. |
| P. F. Pettibone & Co., Printing Annual Report of Com'n.. | 242 00. |
| Chicago Dispatch, Advertising..... | 7 56. |
| | <hr/> \$2,615 88. |

There being no further business the meeting then adjourned.

EDWARD J. PHELPS,

Secretary.

JOHN M. CLARK,

President.

February 29, 1896.

The Civil Service Commission of Chicago met in its office, room 115, City Hall, on Saturday morning, February 29, 1896, at ten thirty o'clock. There were present Commissioners John M. Clark and Christoph Hotz (absent Commissioner Waller), the President in the chair.

The reading of the minutes of the previous meeting was dispensed with.

The President submitted the following letter which, at the request of the Commission, had been addressed to the Corporation Counsel and the reply received to the same:

“CHICAGO, February 11, 1896.

“HON. WM. G. BEALE, Corporation Counsel,
City of Chicago:

“*Sir*:—Section 18 of the Civil Service Act, in providing for salaries and expenses, provides that ‘Any person not at the time in the official service of the city, serving as a member of the Board of

Examiners, or of a trial board, shall receive compensation for every day actually and necessarily spent in the discharge of his duty as an examiner or a member of a trial board, at the rate of \$5.00 per day.'

"The Commission would be glad to have your official opinion as to whether any discretion rests with the Commission in regard to this rate of compensation. Has it the right to employ persons for this work who, in its opinion, are competent to perform it at a less rate than that fixed by law, or must it restrict its appointments to a grade of persons of such ability that such compensation would be recognized as appropriate?

"Also, would a person serving on the Library Board or the School Board, positions to which no compensation is attached, be regarded as 'in the official service of the city'?

Very truly yours,

(Signed) JOHN M. CLARK,

President."

To this the following letter in reply was received, dated February 25th:

"HON. JOHN M. CLARK, President Civil Service Commission,
City of Chicago.

"*Dear Sir:*—I have carefully considered the questions propounded in your letter of February 11th respecting the compensation to be paid to examiners.

"In my judgment the provision of the law fixing the compensation of examiners, not in the official service of the city, at \$5.00 per day is fairly to be interpreted as merely entitling an examiner to such compensation, or as fixing a maximum compensation which the Commission would not be authorized to exceed, and which it would be required to pay in the absence of an express agreement for a different compensation. No other interpretation seems entirely reasonable. It will be observed that the form of the provision is not a requirement upon the Commission to pay an examiner \$5.00 per day, but a mandate directed to the examiner that *he shall receive it*. The literal reading of this language would seem to compel an examiner to accept \$5.00 per day whether he desired it or not. It is hardly to be presumed that this was the intention of the legislature, and if such was their intention, there ought to be some distinct evidence of it in the law. But it will be further noticed that Section 6

confers upon the Commission great discretion respecting examinations, in view of which I cannot think there is any basis for the application of the well-known rule of public policy forbidding a candidate for office to invite support by promising to waive some portion of his rightful compensation. The broad powers given to the Commission respecting examinations seem to exclude all consideration of this rule as an element in the case. It is well understood that a statutory or constitutional right may be waived when no public interest is thereby prejudiced as, for example, the right of trial by jury. The constitution of this state provides that the compensation to be paid for private property when taken for public use under the law of eminent domain 'shall be ascertained by a jury.' The Supreme Court of this state in *Chicago, Milwaukee & St. Paul Railway Co. vs. Hock et al.*, 118 Ill. 587, held that this constitutional right of trial by jury in such a case was a mere privilege which could be waived. Upon the same general line of reasoning I think that the compensation of \$5.00 per day to an examiner is one which may be reduced or waived altogether, at the pleasure of the examiner, by agreement between the examiner and the Commission.

"There can, I think, be no reasonable doubt that a member of the Board of Directors of the Public Library is to be regarded as a person in the official service of the city within the meaning of the provisions of the Civil Service Law relating to examiners. On the other hand I am inclined to the opinion that a member of the Board of Education is not a person in the official service of the city within the meaning of the Civil Service Law, although the question is not free from doubt.

Very respectfully yours,

(Signed) WM. G. BEALE,

Corporation Counsel."

The President reported to the Commission that on February 18th he had been summoned to appear before the Finance Committee in regard to the appropriation to be made by the Council for the use of the Commission during the ensuing fiscal year; that he had appeared as requested and explained to the Committee the necessity of the appropriation asked for; and that on February 19th, after full consultation with Commissioner Hotz, the following letter was written to the Finance Committee, and that no reply had been received to the same:

“To the Honorable the Committee on Finance, of the City Council of Chicago, Hon. M. B. Madden, Chairman:

“Referring to the action taken by your Honorable Committee at its meeting yesterday in reducing the appropriation asked for by the Civil Service Commission, will you permit a brief statement.

“The Commission has carefully gone over its estimates and endeavored to see if it is possible to limit its expenditures for the coming year to the lump sum named by your Committee (\$25,000) and still carry out the provisions of the law.

“As stated yesterday the law requires that the examinations shall (with certain prescribed limitations) be public, competitive and free to all citizens of the United States. .

“After the examinations have been held the papers must be marked, in order that the average obtained by each applicant may be ascertained, and they must be marked by competent persons, and with the utmost care in order that injustice be done no applicant.

“On investigation I find that the Commission now has on its books the names of upward of 2,200 applicants who are awaiting examination for different positions in the city's service. This number is constantly increasing, and the Commission, under the law, is obliged to provide for the examination of all these applicants, and in justice to them it should do so with as little delay as possible.

“As stated to your Committee yesterday the Commission did not ask for more money than it honestly believed should be appropriated for its work, and it begs to repeat the statement then made that it will endeavor honestly, and to the best of its ability, to keep within whatever appropriation the Council shall make for its use.

“But it respectfully protests that with the large and increasing number of applicants before it, and the certainty that the work in its office will be very materially increased for the year, the sum named will not enable it to meet the demands legitimately made upon it in the proper enforcement of the law.

“The Commission would therefore respectfully ask that a sum of not less than \$10,000 be added to the appropriation, as informally agreed upon yesterday, making the total sum not less than \$35,000.

“It believes that if this shall be done it may be able, by the exercise of the closest economy, to carry on the work devolving upon it by law in a manner that will meet the just expectations of the Council

and of the public, but that with a sum less than this satisfactory results cannot reasonably be expected.

“ The Commission will be very glad to appear before your Committee to further explain any of the items in its estimate if you shall so desire, and its books and papers are open for your inspection at all times. Very respectfully,

CIVIL SERVICE COMMISSION,

(Signed) JOHN M. CLARK,
President.”

The Secretary reported that articles had been published in the public press of the city stating that Mr. Geo. Zemanski, whose name appears upon the eligible lists of the Commission for clerks and also for stenographers, had been guilty of discreditable practices which, if true, should exclude him from said lists. The Secretary further stated that at the request of the President he had summoned the said Zemanski to appear before the Commission to show cause why his name should not be stricken from said lists of eligibles, and that he had also summoned witnesses said to be conversant with the facts in the case, and that they were ready to appear before the Commission.

On motion of Commissioner Hotz the case was brought up for consideration.

A copy of the Chicago Record of Friday, February 28th, was submitted, in which appeared a statement that George Zemanski had forged the name of Chief Badenoch of the Police Department to a request for a pass, and had presented the same at the office of the General Manager of the Chicago, Rock Island and Pacific Railroad Company.

The first witness examined was Mr. Alex. J. Johnson, Private Secretary to the Chief of Police. Mr. Johnson, on being sworn, testified that on learning that a forgery had been committed his suspicions soon pointed to George Zemanski as the probable author; that he sent for him and confronted him with the facts; that Zemanski denied any knowledge of the matter; that he (Johnson) went with Zemanski to the railroad office, and that the latter was there identified as the party who had presented the forged letter asking for the pass.

Mr. B. Sunank, Chief Clerk in the General Manager's office of

the Chicago, Rock Island and Pacific Railroad Company, testified that he was not present when the forged letter was presented, but that General Manager Truesdale had told him of the facts and had pointed out Zemanski as the party who presented the letter.

Henry Kessler, clerk in the same office, testified that he was present when the forged letter was presented, and that he recognized Mr. Zemanski as the man who had presented the same.

John J. Badenoch, Superintendent of Police, testified that he had seen the letter purporting to bear his signature, which had been presented at the railroad company's office, and that the same was a forgery; that he had charged Zemanski with being the author of the letter and that the latter had denied it.

He stated further that Zemanski had been an applicant for a position in his office and that he had at first been in favor of appointing him, but that on further investigation he had decided not to do so.

Mr. Zemanski was then called upon for a statement as to the truth or falsity of the charge. He declined to be put under oath, or to make any statement. He said that he would appear before the Commission on the following Tuesday with his lawyer and would make his statement then. It was explained to Mr. Zemanski, and to all present, that the Commission was not conducting a trial to decide as to the guilt or innocence of Mr. Zemanski of the charges made; that the Commission was not a court of justice and did not wish it understood that it was attempting to act as such.

It was further explained that under its rules (Rule III, Sections 4 and 5) the burden of proof as to character rested entirely with an applicant; and that evidence at any time produced to the Commission of any disgraceful act committed by an applicant would be deemed sufficient cause to exclude said applicant from examination, or for removal from a register of eligibles after examination.

The Commission was pursuing this investigation for the purpose of satisfying itself as to whether a man against whom such charges were publicly made, by responsible persons, was entitled to be certified to a position of trust and responsibility in the public service. It was finally explained that the Commission felt it was its duty to the service to make the investigation.

In view of the evidence submitted, and of the fact that the accused declined to make any statement in refutation of the same, although given the fullest and freest opportunity to do so, on motion of Commissioner Hotz, it was unanimously ordered that the

name of George Zemanski be stricken from the list of eligibles for clerks and for stenographers, and the Secretary was instructed to cause this to be done.

The Secretary submitted a list of applications now on the books of the Commission for positions in the different branches of the city's service. The list contained upward of 2,200 names.

On motion of Commissioner Hotz, the Secretary and Chief Examiner was instructed to at once prepare a series of examinations for all branches of the Classified Service for which there were no eligible lists, and to advertise the same for as early dates as practicable.

The Secretary reported that, in his judgment, on account of the limited appropriation granted to the Commission by the Council, it would be necessary to reduce the force of examiners for marking papers, and to make other reductions.

On motion of Commissioner Hotz, the Secretary was instructed to dispense with the services of Mrs. Emma A. Tibbetts, and to reduce the compensation of Mr. Wm. C. Gamble, Miss Emily Fogg, Miss Mary F. Stillwell, and Miss Mary Bacon, from \$5.00 to \$3.00 a day.

The Secretary was also instructed to employ as stenographer in place of Miss Florence V. Watson, Miss Minnie F. Kennedy, who stands next highest of the women upon the eligible list of stenographers, at a salary of \$50.00 per month, to serve during the pleasure of the Commission.

The following bills for salaries and expenses during the month of February were submitted by the Secretary, audited, and ordered sent to the Comptroller for payment:—

| | | |
|---|----|------------|
| Cameron, Amberg & Co., Stationery..... | \$ | 4 50 |
| Cameron, Amberg & Co., Stationery..... | | 6 52 |
| Cameron, Amberg & Co., Stationery..... | | 4 65 |
| Cameron, Amberg & Co., Stationery..... | | 4 20 |
| Cameron, Amberg & Co., Stationery..... | | 1 20 |
| E. J. Phelps, Sundry expenditures, as per itemized bill.. | | 60 57 |
| A. H. Revell, Furniture for use in markers' room..... | | 46 00 |
| Cameron, Amberg & Co., Stationery..... | | 2 45 |
| Pay Roll for February..... | | 2,091 66 |
| Cameron, Amberg & Co.,..... | | 2 85 |
| The Chicago Dispatch, Advertising..... | | 4 32 |
| | | <hr/> |
| | | \$2,228 92 |

There being no further business the meeting then adjourned.

EDWARD J. PHELPS,
Secretary.

JOHN M. CLARK,
President.

March 6, 1896.

The Civil Service Commission of Chicago met in its office, room 115, City Hall, on Friday, March 6, at 1:30 P. M.

Present: Commissioners Clark, Waller and Hotz, the President in the chair.

The minutes of the meetings of January 14, January 27 and February 29 were read and approved.

The Secretary reported that, as instructed by the Commission, he had informed Mr. Wm. C. Gamble, Miss Emily Fogg, Miss Mary F. Stillwell and Miss Mary Bacon that, as a means of reducing the expenses of the Commission to conform with the limited appropriation made by the Council for the ensuing fiscal year, it had become necessary to reduce their compensation to \$3.00 per day. Mr. Gamble, upon receipt of this notice, tendered his resignation, which was accepted. The others signified their willingness to continue the work at the reduced rate of compensation. The Commission instructed the Secretary to express to them its thanks for this evidence of their continued interest in the service.

The President reported that he had requested the Board of Medical Examiners to meet with the Commission at this hour for consultation in regard to their compensation for the ensuing year, and also to consider the cases of a number of applicants who had been rejected by the Board and who desired to present themselves for re-examination.

The members of the Board were all present: Drs. Cuthbertson, Goodkind, Edwards, Plummer and Hawley.

After concluding the re-examinations asked for, the Board met in consultation with the Commission on the question of compensation. Dr. Cuthbertson, President of the Board, stated that he had discussed the matter with his colleagues and, at their request, begged leave to submit the following communication:

“CHICAGO, March 5, 1896.

“THE CHICAGO CIVIL SERVICE COMMISSION:

“In compliance with the request made by your Commission your Medical Board met to decide on the amount of compensation which, in their opinion, they were entitled to for the services rendered by them for the current year. Dr. Hawley was requested to put before the meeting the figures estimating the probable amount of

work which the Board would be required to do during the year. After his presentation of the estimate, due consideration was given the fact that the bulk of the work would fall in the early months of the year, and that the balance of the time would be comparatively free from labor. But notwithstanding this division of work the amount of time devoted to the examinations during the year would average about the same. We would like to call the attention of the Commission to the fact that two physicians in the past received from \$2,000 to \$5,000 apiece for doing about one-tenth of the work which your Medical Board would be required to do. It does not matter from what source this money came, as the fact remains that these amounts were considered by the city authorities for years past as a proper remuneration for the work done.

"We would like very much to mention the fact that the City of New York pays \$6,000 per year to each of twelve men for doing police work alone. While we understand the position the Civil Service Commission of this city is placed in with reference to their appropriation and the hostile feelings which are entertained in certain quarters toward the perpetuation of this Commission, yet we feel that, as representatives of the Chicago Medical Society, a precedent in the payment of medical services rendered by this or any subsequent Board is to be established, and the amounts named by us are, in our opinion, only fair and just. We have the honor to submit the following proposition, viz.: Dr. Hawley, as Secretary of the Board, to receive \$1,500, and the other members of the Board to receive \$1,000 each for the current year. In return for this salary the Board will hold itself in readiness to hold an examination whenever called on, and no less than three members to be present at each meeting of the Board to constitute a quorum, and the high standard and full work to be maintained at all examinations as has been the custom of the Board to adopt in the past. The Board intends that a full membership will be present at each examination to be held, but that in the event of any one or two members being unavoidably detained, at least three, which will constitute a majority of the Board, will conduct each examination.

"All of which is respectfully submitted to your honorable Commission.

(Signed) WM. CUTHBERTSON,
President."

The President reported that in view of this consultation he had addressed the following communication to the Chiefs of the Departments of Police and of Fire:

“March 5, 1896.

“*Sir*: The Civil Service Commission is about arranging with its Medical Board the matter of compensation for services during the ensuing fiscal year. Owing to the insufficient appropriation the Commission is obliged to curtail in every way possible, and to economize wherever practicable without too seriously crippling its service.

“The Commission would be glad to know if your department desires to avail itself of the services of this Medical Board further than in its regular duty of examining candidates for original entrance, and for promotions in the police service.

“If there are other duties, such as the examination of men for retirement from service, etc., etc., in your department, for which this Board could, in the interests of public service, be made available, will you kindly advise the Commission of the nature and probable extent of such duties.

“An early answer will very much oblige,

Yours truly,

THE CIVIL SERVICE COMMISSION,

JOHN M. CLARK,

President.”

An answer from only one of the departments has as yet been received.

A full and frank interchange of opinion was had between the members of the Commission and those of the Medical Board.

The Commission stated that it had the fullest confidence in the Medical Board, as at first established, and was satisfied that its services could not be dispensed with or materially reduced without detriment to the public service. Still, under the reduced appropriations made for its use by the City Council, it became its duty to economize in every way practicable. It doubted whether it would be possible, with the funds at its disposal, even to continue its present arrangement with the Board for the whole year, though it would be very glad to do so, at least until the series of examina-

tions now about to be held could be completed, and longer than that if it should be found practicable to do so.

The Board was informed that the matter would be further considered by the Commission, and that the President of the Commission would inform the President of the Board of the conclusions arrived at.

The subject was discussed by the Commission after the Medical Board had retired, and the President of the Commission was instructed to write a letter to the President of the Medical Board embodying the views of the Commission.

There being no further business the meeting then adjourned.

EDWARD J. PHELPS,
Secretary.

JOHN M. CLARK,
President.

March 18, 1896.

The Civil Service Commission of Chicago met in its office, room 115, City Hall, March 18th, at 11:30 o'clock.

Present: Commissioners Clark, Waller and Hotz, the President in the chair.

The minutes of the meeting held March 6th were read and approved.

The Secretary reported that, as instructed by the Commission, an examination for promotion in Division B (Civil Engineers) had been advertised to take place on March 20th, and that the time for receiving applications closed on Tuesday, March 17th; that at that date only three applications had been received.

In view of the fact that the rules provide that when requisition is to be filled by promotion, names shall be certified in groups of three, and whereas only three candidates for promotion had filed applications for examination, with probability that not all would pass, and even if they should all pass a new examination would almost immediately be necessary, therefore, on motion of Commissioner Hotz the promotion of rodmen to the position of instrument men or assistant engineers was at this time deemed impracticable, and the examination called for March 20th was declared off.

The Secretary further reported that investigation showed that there were only two or three men in the employ of the city in the capacity of instrument men; that they were in the water department and were paid from the water fund, and not from ap

tion; that their pay was from \$1,200 to \$1,400 per year, thus placing them in the fourth grade.

Also, that in this year's appropriation bill the pay of the assistant engineers in the sewer department had been reduced from \$1,620 to \$1,500 per year, thus placing them for the present in the fifth grade, though it was deemed probable that future appropriations would restore the position to the sixth grade; that assistant engineers in the Bureau of Streets and in the City Engineer's department were now receiving \$1,620, which placed them in the sixth grade, and that the requirements of all these positions were such as to require practically the same examination.

In view of all these facts, and after full discussion of the subject, the following motion was submitted by Commissioner Waller and seconded by Commissioner Hotz:—

“Resolved, That, in future and until further notice, original entrance to the Classified Service, Division B (Civil Engineers), shall be as rodmen, in grade 2 or 3, as vacancies may occur; that a person appointed after examination to, and serving in, 2nd grade may, on vacancy occurring, be raised to position in 3rd grade without further examination; and that all persons serving in 2nd or 3rd grade, Division B, shall be equally eligible to enter an examination for promotion.

“Also resolved, For the purpose of making examinations for promotion more practicable, and in the interests of the service, that, until further notice, grades 4, 5 and 6, Division B, be grouped together and for the purpose of promotion be considered as one grade, to which promotions shall be made from 2nd or 3rd grades.

“That persons who have passed an examination, either original entrance or promotion, and whose names stand on a register of eligibles for this grade will be certified for appointment in the order of their standing, as vacancies may occur, in either the 4th, 5th or 6th grade places. If appointed in either of the lower grades they can, on vacancy occurring, be raised up to but not above the 6th grade without further examination; and that all persons serving in either the 4th, 5th, or 6th grades, Division B, shall be equally eligible to enter an examination for promotion to the 7th or higher grades.” Carried.

There being no further business the meeting then adjourned.

EDWARD J. PHELPS,
Secretary.

JOHN M. CLARK,
President.

March 25, 1896.

A meeting of the Civil Service Commission of Chicago was held in its office, room 115, City Hall, on Wednesday, March 25th, at 11 A. M. Present: Commissioners Clark, Waller and Hotz, the President in the chair.

The President reported that, in accordance with instructions given at the meeting of March 6th, he had addressed a communication to the President of the Medical Board, which read as follows:

“CHICAGO, March 9, 1896.

“WM. CUTHBERTSON, M.D., President Medical Board,
Civil Service Commission of Chicago.

“*Sir*:—The Civil Service Commission of Chicago has carefully considered the communication submitted by you, as President of its Medical Board, regarding the compensation which the members of the Board should receive for their services during the ensuing fiscal year.

“While the Commission is of the opinion that if the number of applicants for examination shall continue to be as great throughout the year as present appearances would indicate, the compensation stated in your communication would not be excessive, still the very limited appropriations made by the Council for the use of the Commission during the ensuing year renders it impossible for it to entertain any proposition looking to an increase of expenditure, however necessary such increase may seem to be.

“The Commission must, as a matter of course, endeavor to do all the work legitimately devolving upon it in the proper enforcement of the Civil Service Law, and it should see that the work is continued with the same care and fidelity that has thus far been shown. There is no part of the work requiring a higher order of ability and of professional knowledge than that which is entrusted to its Board of Medical Examiners.

“The Commission feels that in the interest of economy it will for the present at least be compelled to reduce the membership of the Medical Board to four members (instead of five as now constituted), and in this it respectfully asks your concurrence.

“The Commission desires me to ask if, in view of all the circumstances, the four remaining members of the Board will, in the interests of the public service, be willing to continue the work at the

rate of compensation already fixed and as named in the law (that is, \$5 per day for each day's service actually rendered).

"As stated in its letter to the Chicago Medical Society, at whose request you gentlemen have undertaken this duty, the Commission admits that the rate of compensation is inadequate for the nature of the service rendered; but it believes that by continuing in the work, at least until the present emergency shall have been passed, you gentlemen will earn the gratitude of all citizens who are interested in the success of the merit system as a part of the municipal administration of Chicago.

"The Commission desires me to express its fullest appreciation of the value of the services already rendered by your Board, and the hope that the arrangements above suggested may for the present be continued, subject, of course, to termination at any time by any member of your Board (acting for himself) or by the Commission.

Very truly yours,

(Signed) JOHN M. CLARK,
President."

Also that he had received the following answer to the same:

"March 24, 1896.

"THE HON. JOHN M. CLARK, President Civil Service Commission,
City of Chicago.

"*Dear Sir:* At the recent meeting of your Medical Board, your communication of the 9th inst. was brought up for consideration, and I have the honor to submit the determinations which were arrived at, as follows, viz.:

"In regard to the reduction of the membership of the Board to four members, your Board is of the opinion it would best subserve the interests of economy were the Board to remain as originally constituted, as the number of applicants examined daily would be larger with five members than with four, and thus the number of examinations to be held during the year would be reduced. Further, with four members, the vote of the Board would often result in a tie, while with the present membership the presiding member would have the final vote, thus making a majority, as the law requires.

"The Board instructs me to inform you that its members stand ready and willing to make any reasonable personal sacrifices in

order to further the interests of and uphold your Commission in its arduous duties, and in view of the straitened financial circumstances in which you are placed, we will continue to serve for the compensation we have already received until such time when your monetary distress shall have been relieved.

“The Board further desires me to express its hearty thanks for your kind expressions of appreciation and good will, and we trust that the kindly relations existing between the Civil Service Commission and the Medical Board shall continue.

Very truly yours,

(Signed) WM. CUTHBERTSON,

President.”

On motion of Commissioner Waller, seconded by Commissioner Hotz, it was ordered that for the present and until further notice, the Medical Board remain as at present organized.

The Secretary reported that Bernard F. Straube, who was certified (in response to a requisition from that department for a meat inspector) as meat inspector to the Health Department on February 5, 1896, had filed a verbal complaint that he, Straube, received a letter from the Commissioner of Health intimating that the Health Department would probably be obliged to dispense with his (Straube's) services. The letter referred to, which was submitted by Mr. Straube, cited the fact that the Common Council, in making the appropriation for the Health Department for the current fiscal year, had reduced by one the number of meat inspectors, for which funds were allowed the department. Inasmuch as the department had one more meat inspector than it had money for which to pay, and inasmuch as Mr. Straube was the last person appointed, and therefore had the shortest experience in the service, it seemed to the Commissioner of Health that he should be the one to be removed. After considerable discussion and careful consideration of the provisions of the law, especially of Section 10, the Commissioner of Health was invited to meet with the Commission, and in response to the invitation he appeared before it. He said that Mr. Straube had not been removed, but that a letter had been written notifying him of the action of the Council and of the views of the Commissioner of Health as to what ought to be done.

The Commission suggested to the Commissioner of Health that

all the meat inspectors in the Health Department be examined, and that the man receiving the lowest mark be dropped. This plan did not commend itself to the Commissioner of Health, and after some further discussion he and the Civil Service Commission united in the conviction that to remove Mr. Straube would be, in view of the law, to establish a precedent discriminating against civil service appointees. The Commission believed that it would be a dangerous precedent to establish, and one that would necessarily and in all cases work to the prejudice of men appointed through examinations, for the reason that since the law went into effect all appointments which have been made under it are necessarily the latest appointments.

After some further discussion the conclusion was reached that should it become necessary to dispense with the services of one of the inspectors now employed, the selection of the one to be discharged should depend upon the comparative merit of the men, and not upon the date of their appointment.

There being no further business the meeting adjourned.

EDWARD J. PHELPS,

Secretary.

JOHN M. CLARK,

President.

April 6, 1896.

The Civil Service Commission of Chicago met in its office, room 115, City Hall, on Monday, April 6, 1896, at 11 A. M.

Present: Commissioners Clark, Waller and Hotz, the President in the chair.

The Secretary submitted a report from the Medical Board on the case of Miss Margaret Campbell, who had applied for position as police matron.

At the time of the examination (November 2nd) the Medical Board took her case under advisement. It had submitted her to a subsequent examination, and had also obtained evidence in regard to her physical condition from her physician. As a final result of the subsequent examination and information obtained it now recommended her acceptance. The Secretary was instructed to place her name on the register of eligibles in the position to which the general average obtained at the examination entitled it.

The President reported to the Commission that, in response to

a requisition from the Police Department, received on April 1st, fifty men standing highest on the register of eligibles for positions as patrolmen had been certified for appointment. The President further reported that the men had, in response to notice, reported for duty at the headquarters of the Police Department; that on receiving them the General Superintendent of Police was impressed with the fact that many of the men seemed deficient in stature and in physical qualifications for police service.

At the request of the Commission, all the men certified were assembled in the office of the General Superintendent on Saturday, April 4th, for the purpose of ascertaining whether any, and if so how many, fell below the standard established by the Commission in its rules for entrance to the police service.

As the result of a careful examination, conducted by Drs. Goodkind and Hawley of the Medical Board, in the presence of the General Superintendent and other officers of the department, and members of the Commission, it was found that with one exception all the men certified conformed to the requirements of the rules, and they were therefore accepted.

The exception referred to was in the case of Chas. W. Gerber, who proved to be only 5 feet $7\frac{1}{2}$ inches in height, a mistake evidently having been made in his measurement at the time of examination. As a number of men had been rejected who came nearer meeting the requirements in this respect than he, it would have been manifestly unfair to them, as well as to the service, to allow him an advantage through the error, and on motion of Commissioner Waller, seconded by Commissioner Hotz, the Secretary was instructed to withdraw the name of Chas. W. Gerber from certification, and to remove the same from the register of eligibles.

In view of the fact that so many of the men certified were very close to the minimum requirement for admission and below the stature desired for policemen, the question was discussed as to whether it would not be wise to raise the standard, especially in the matter of height and of minimum chest measurement.

On motion of Commissioner Hotz, seconded by Commissioner Waller, the whole matter was referred to the Medical Board, with instructions to investigate and report to the Commission its conclusions.

The General Superintendent of Police appeared before the Commission, accompanied by Mr. Wm. J. Walsh, one of the men recently certified to the Police Department. The Superintendent

stated that before swearing the men into the service he had asked each of them a number of questions as to their past experience, condition, etc., for his own information in assigning them to duty; that in answer to these questions Mr. Walsh had made statements which he, the General Superintendent, knew to be false. He submitted a list of the questions asked, and Mr. Walsh's answers, and pointed out those to which he knew the answers were untruthful. He further stated that he could not feel safe in intrusting important duties to a man whom he knew to be unworthy of belief.

Mr. Walsh was asked if he had any statement to make to the Commission in answer to the charges submitted by the General Superintendent. He stated that he had made the answers to the Superintendent as charged, and that they were not true. He gave no explanation as to why these false statements were made, but he plead with the Commission to overlook the offense, and promised if it would do so that he would never again deviate from the truth in any way.

After careful consideration, Mr. Walsh was informed that in the opinion of the Commission he had forfeited by his own conduct any claim to favorable consideration, and on motion of Commissioner Waller, seconded by Commissioner Hotz, it was ordered that, under authority of Rule III, the certification of Wm. J. Walsh be withdrawn, and that his name be stricken from the list of eligibles.

The following bills for the month of March were submitted, audited, and ordered sent to the Comptroller for payment:

| | |
|---|------------|
| Cameron, Amberg & Co., Stationery | \$ 5 70 |
| Cameron, Amberg & Co., Stationery | 1 25 |
| A. G. Spalding & Co., Dumb bells and appliances for physical tests | 9 60 |
| American Office Supply Co., Files case | 48 00 |
| Cameron, Amberg & Co., Blanks | 38 50 |
| Cameron, Amberg & Co., Invoice books | 5 70 |
| Cameron, Amberg & Co., Blank forms | 32 25 |
| Waukesha Spring Water | 3 75 |
| Pay Roll for March | 1,766 18 |
| Pay Roll for March | 425 00 |
| U. S. Government stamps and stamped envelopes | 151 40 |
| Chicago Dispatch, Advertising | 18 90 |
| J. M. W. Jones Printing Co., Letter heads | 18 00 |
| | <hr/> |
| | \$2,524 23 |

There being no further business the meeting then adjourned.

EDWARD J. PHELPS,
Secretary.

JOHN M. CLARK,
President.

April 9, 1896.

The Civil Service Commission of Chicago met in its office, room 115, City Hall, on Thursday, April 9th, at 11 A. M.

Present: Commissioners Clark, Waller and Hotz, the President in the chair. The minutes of the last three meetings were read and approved.

The Secretary and Chief Examiner reported that it was desirable that early examinations should be held for original entrance to Division E (Electrical Service) and Division I (Inspector Service) in the Department of Public Works.

The President stated that before taking up the subject of these examinations the Commission should officially consider the question of the grade of employes in the Official Service who are paid by the day, as there are a number of such places in both of the divisions above named.

It has been claimed that as men employed by the day are liable to be called upon to work every day, in emergency, even including Sundays and holidays, therefore to establish the grade based upon their pay, the daily pay should be multiplied by the number of days in the year. In practice this would place the position in a higher grade than the amount of pay actually received in a year would justify, for as a matter of fact no man ever does or could work every day in the year in justice either to himself or the service.

It has also been suggested that the average yearly amount paid to each per diem man be ascertained and the grade of the position based upon that, but such an average would be good only for the year in which it was obtained. The question is of importance only in its relation to examinations for promotion, the law and the rules providing that persons in the next lower grade are entitled to enter promotion examinations.

After thorough consideration, it was the unanimous opinion of the Commission that at least with the experience thus far had, it is impossible for it to establish a rule of general application that would be fair to all or which might not work injustice to some, and on motion of Commissioner Hotz, seconded by Commissioner Waller, it was ordered "That a per diem compensation cannot be used as a basis for definitely determining the grade to which a position belongs, and that in all examinations for promotion in the Official Service when there are in the same division and department, in which

the examination is to be held, positions the compensation of which is fixed by the day, the Commission shall decide in each case as to whether the holders of such positions, under a fair construction of the law and the rules, are eligible to take the examination or not."

The President stated that several consultations had been held with Prof. Barrett, Chief Electrician of the city, in regard to the character of the work, and the compensation, in the lower grades of the electrical service. The positions are known as linemen, lamp trimmers, dynamo tenders, lamp repairers, telephone operators, assistant electrical machinists, assistant electrical instrument men, etc., etc. Some of these men are paid by the day and others by the month. The essential part of the examination would be about the same, the difference being only in certain technical questions touching the special work for which they had applied. Furthermore, in practice it would seem desirable, and in the interest of the service, that in work of this character men should be advanced from one position to another within the same grade, as they demonstrate their fitness for such advance, without being required to pass another examination, so long as the duties of the advanced position were not such as to render a second examination necessary.

After thorough discussion of the subject, the following motion was submitted by Commissioner Waller, and seconded by Commissioner Hotz:

"Resolved, That until otherwise ordered, entrance to the Classified Service in Class A, Division E (Electrical Service), shall be in first or second grades, as vacancies may occur, and requisitions shall be filled from the list of eligibles for the branch of the service specified in the requisition, or from the list which, in the opinion of the Commission, shall, by reason of the examination held, nearest conform thereto;

"That men serving in any branch of the Electrical Service, in either the first or second grade, may be advanced without examination to any other position in the same division up to but not beyond the limit of the second grade;

"And that all persons serving in either the first or second grades of Division E shall be equally eligible to enter an examination for promotion to the third grade." Carried.

The President reported that numerous consultations had been held with his Honor, the Mayor, with the Commissioner of Public Works, and with the chiefs of the several bureaus in the Depart-

ment of Public Works, in regard to examinations to be held for entrance to Division I (Inspector Service); that investigation showed that there were by name between twenty and thirty different kinds of inspectors in the employ of the city, while as a matter of fact the duties of these positions were such that, in the opinion of the Commission, based upon information obtained through its investigations, a very much smaller number of examinations need be held in order to secure candidates fitted for any one of them. To some extent the same state of facts existed in other departments and other branches of the service. After much discussion and careful consideration of the subject in all its bearings, it was moved by Commissioner Hotz, seconded by Commissioner Waller, as follows:

“Resolved, That in holding examinations, and the preparation of lists of eligibles for appointment in the Classified Service, the duties of the position to be filled rather than the name by which it is called shall be considered;

“That in the interests of economy the number of examinations held should be limited to the actual necessities of the service, and to that end a single examination may be so conducted that from the lists of eligibles supplied by it, persons may be certified to a number of positions differing in name, but similar in the qualifications required; and

“Resolved, That to fill any requisition that may in future be received the Commission will certify from that list of eligibles which, by reason of the examination held, shall, in its judgment, nearest conform to the requirements of the position to be filled.”
Carried by unanimous vote.

The following motion was submitted by Commissioner Waller, and seconded by Commissioner Hotz:

“Resolved, That an examination for original entrance to the Classified Service, Class A, Division I (Inspector Service) be held, beginning on April 25th, and continuing until completed, for the following positions: material inspectors, mining inspectors, mason inspectors, plumbing inspectors, paving inspectors, ward and street inspectors, sidewalk inspectors and house drain inspectors;

“That, until further action shall be taken by the Commission, original entrance to the Classified Service in Division I (Inspectors

in the Department of Public Works) shall be in 1st, 2nd or 3rd grades, as vacancies may occur;

“That persons serving in the 1st, 2nd or 3rd grades may be advanced up to but not beyond the limit of the 3rd grade without examination;

“And that all persons serving in either the 1st, 2nd or 3rd grades shall be equally eligible for entrance to an examination for promotion to the 4th grade;

“That requisition for any inspector that may be called for in the Department of Public Works shall be filled by certification from that list of eligibles which, in the opinion of the Commission, shall, by reason of the examination held, nearest conform to the duties of the position to be filled.”

The motion was carried by unanimous vote. The Secretary was instructed to see that advertisement and other necessary arrangements for holding the examinations for original entrance to Divisions E and I, above referred to, be made without delay.

There being no further business the meeting then adjourned.

EDWARD J. PHELPS,

Secretary.

JOHN M. CLARK,

President.

April 16, 1896.

The Civil Service Commission of Chicago met in its office, room 115, City Hall, on Thursday, April 16th, at 11:30 A. M.

Present: Commissioners Clark, Waller and Hotz, the President in the chair. The minutes of the last meeting were read and approved.

The Secretary submitted a communication from the examiner in charge of markers, stating that he had received offers of other positions at a larger compensation than he is now receiving from the Commission, and asking what inducements the Commission had to offer him to remain permanently in the service, and desired to know specifically what compensation it would offer him for next fall.

After discussion, it was the unanimous opinion of the Commission that the term of service of all its employes must be during the pleasure of the Commission, and that it could not bind itself or its

successors by promises to take effect at some future date; and further, that with the limited appropriations at its disposal it was not probable that any increase of salaries could be allowed during the present fiscal year.

The Secretary submitted a communication from Dr. W. C. Bouton, whose name stands second on the list of eligibles for the position of medical inspector, stating that he was considering the question of removing his residence to one of the suburbs, and asking if his removal from the city would interfere with his standing on the list of eligibles and with his appointment should his name be reached. After careful consideration, the unanimous opinion of the Commission was that qualifications for appointment in the Classified Service are the same as for examination for entrance to it; that one of these qualifications is that the applicant shall be a resident of the City of Chicago, and that this should apply to all employes of the Commission, and to all persons certified by it for appointment to the Classified Service, excepting only such as may be exempt therefrom under provision of Section 3, Rule II. The Secretary was instructed to inform Dr. Bouton that his removal from the city would be regarded as sufficient reason for the striking of his name from the list of eligibles.

The question of the adoption of some method of investigating as to the habits and moral character of persons who have passed examination and whose names stand on a list of eligibles awaiting certification, was then considered. Experience has shown that it is not safe to rely entirely upon the vouchers which accompany an application, nor upon information being brought forth by publicly posting the list of eligibles. It has been found impracticable for the Commission or its employes, with the force at present employed, to undertake this work. The Commission had been promised assistance from the Civic Federation, especially in regard to investigating the eligible list for policemen, but thus far the aid promised has not been furnished.

On motion of Commissioner Hotz, seconded by Commissioner Waller, it was ordered that an additional examiner be employed, at a salary of \$3.00 per day for each day actually spent in the service of the Commission, who shall as part of his duty be utilized in making such investigations as the Commission shall direct. Carried.

It has been suggested that there are organized credit companies in the city which might be able to undertake this work of investi-

gation, and at more reasonable rates and possibly with more satisfactory results than could be reached by the employment of men for the purpose directly by the Commission. The Secretary was instructed to consult with some of these companies and obtain a proposition from them.

There being no further business the meeting then adjourned.

EDWARD J. PHELPS,

Secretary.

JOHN M. CLARK,

President.

April 30, 1896.

The Civil Service Commission of Chicago met in its office, No. 115, City Hall, on Thursday, April 30th, at 11 A.M.

Present: Commissioners Clark, Waller and Hotz, the President in the chair.

The Secretary and Chief Examiner reported that the examination held during the past week for original entrance to the Electrical Division, and also for entrance to Division I (Inspection Division, Department of Public Works), had been well attended and had passed off satisfactorily.

He also reported that preparations were made for an examination of laborers, beginning May 11th, and that there were already on the books nearly two thousand (2,000) applicants for this examination.

The following bills for salaries and expenses incurred during the month of April were submitted, audited and ordered sent to the Comptroller for payment:

| | |
|--|------------|
| Cameron, Amberg & Co., Stationery..... | \$ 2 70 |
| Cameron, Amberg & Co., Stationery..... | 9 04 |
| Cameron, Amberg & Co., Printing..... | 30 85 |
| Chicago Telephone Co., 1st quarter..... | 33 75 |
| Cameron, Amberg & Co., Stationery..... | 3 60 |
| Cameron, Amberg & Co., Stationery for examinations.... | 81 25 |
| Chicago Dispatch, Advertising..... | 3 24 |
| Pay Roll for April..... | 1,919 16 |
| | <hr/> |
| | \$2,083 59 |

There being no further business the meeting then adjourned.

EDWARD J. PHELPS,

Secretary.

JOHN M. CLARK,

President.

May 25, 1896.

The Civil Service Commission of Chicago met in its office, No. 115, City Hall, on Monday, May 25th, 1896, at 10 A.M.

There were present Commissioners Clark, Waller and Hotz, the President in the chair.

The minutes of the last two meetings were read and approved.

The President stated, in regard to the investigations, recently held, and still in progress, under Section 14 of the Act, that minutes of the daily meetings of the Commission while conducting these investigations, are kept, and that he would, at the proper time, submit a formal report of the same to the Commission, that it may appear in complete and succinct form on the records.

The Secretary presented the case of Warren H. Sponenberg, a probationer in the police service, who was certified to the department on November 12th, 1895. He was charged with intoxication, and the records of the investigation before the investigating committee showed that he "pleaded guilty to the charge and threw himself on the clemency of the Board." The investigating committee unanimously recommended that the defendant be discharged from the service. At the request of the Commission the Secretary wrote to Mr. Sponenberg, asking him to appear before it on Saturday, the 23rd, at 11 A.M., to give reason, if any he had, why the recommendation of the committee should not be approved. He failed to appear at the time named or since, and from the evidence presented and the statement of Secretary Phelps, who was present at the investigation on behalf of the Commission, it was, on motion of Commissioner Hotz, seconded by Commissioner Waller, ordered that the recommendation of the committee be approved; and the Secretary was instructed to notify the Superintendent of Police to that effect.

The President reported to the Commission that, owing to the large number of applicants presenting themselves for examination, the work of the office had largely increased and was running behind; that with the force at present employed, although all were working faithfully and often overtime, it was simply impossible to keep up with the work; and furthermore that the compensation now paid to some of the employes was so small, in view of the work required, that they could better themselves by going elsewhere, and it was believed that they would do so unless some changes were made. The Commission has tried faithfully to keep its ex-

penses within the appropriation made for its use by the City Council, and it now finds that its work is being crippled thereby.

It was the unanimous opinion of the Commission that when it formally advertised an examination, it must hold itself in readiness to examine all applicants who presented themselves to take the same; that its office work must be kept up, so that no unreasonable delay should be had in ascertaining the results of such examination and notifying participants of the same.

After a full discussion of the subject, it was moved by Commissioner Waller, seconded by Commissioner Hotz, that an additional clerk be employed in the office of the Commission, at a salary of \$800.00 per annum, and that the person whose name stands highest on the eligible list for the clerical service be offered the appointment. Also that the salary of Patrick F. Guerin, clerk, from and after June 1st, be at the rate of \$75.00 per month, and that the salary of Alfred J. Sweeney, messenger, from and after June 1st, be at the rate of \$35.00 per month. Carried by a unanimous vote.

The Secretary and Chief Examiner was instructed to secure the temporary services of competent experts to assist in marking the technical portion of the papers of the examinations recently held for inspectors in the Department of Public Works, and of two or more assistants to the Board of Markers, in disposing of the mass of work now accumulated in that department.

The Secretary reported that, in conformity with authority granted at meeting of April 16th, he had employed Mr. James S. Rogers, of 5535 Monroe avenue, as an examiner, and that he began working on April 16th, salary at the rate of \$3.00 per day, and to serve during the pleasure of the Commission.

There being no further business the meeting then adjourned.

EDWARD J. PHELPS,

Secretary.

JOHN M. CLARK,

President.

May 26, 1896.

The Civil Service Commission of Chicago met in its office, room 115, City Hall, on Tuesday, May 26th, at 11 A.M. There were

present Commissioners Clark, Waller and Hotz, the President in the chair.

The minutes of the last meeting were read and approved.

The President called attention to the investigation recently held by the Commission under and by virtue of Section 14 of the Civil Service Act, and stated that in order that a proper record of the same should be made in the proceedings of the Commission, he would submit the following summary of the proceedings:

The investigation was begun on the 13th day of May, and occupied practically the whole time of the Commission for four days.

Mr. Easley, Secretary of the Civic Federation, had previously appeared before the Commission on Tuesday, May 12th, and desired to submit charges as to violation of law in certain departments of the city's service.

Upon consultation, the Commission was of the unanimous opinion that an investigation based upon formal charges would be in the nature of a trial, and inasmuch as the law confers upon the Commission no power to inflict penalties, it could not have intended that it should hold trials. Furthermore, an investigation based upon formal charges would naturally be made along the line of the charges, and might not be as broad and comprehensive as the interests of the service would require. For these and other reasons, the Commission stated that it would decline to receive formal charges from any source as the basis for an investigation under Section 14 of the Act, but that it would at all times gladly receive information from any source in regard to matters proper to be brought to the attention of the Commission, and that on information received it would, from time to time, institute such investigations as in its judgment seemed necessary and proper.

The Commission after thorough discussion of the subject, finally decided to hold an investigation as to the enforcement of the law and the rules, and the conduct and action of appointees in the Classified Service employed in District No. 1, Bureau of Streets, Department of Public Works. Through the courtesy of the Civic Federation, the services of Mr. Luther Laffin Mills were placed at the disposal of the Commission, without expense to the city, to assist in conducting the investigation, and in the examination of witnesses.

On May 13th, subpoenas were issued for the appearance of James O. Bracken, Foreman, and Wm. Henneberry, Asst. Foreman, of said District No. 1, to appear before the Commission and

testify. The subpoenas were legally served by Mr. Phelps, Secretary of the Commission, and the parties refused to appear in answer to the same. Under provision of Section 33 of the Act, application was at once made to Judge John Barton Payne of the Superior Court, who ordered that an attachment be issued and the parties brought before the court. Before the serving of the attachment Mr. Bracken and Mr. Henneberry appeared before the Commission, accompanied by Mr. George Gibbs, who desired to be recognized as their attorney. The Commission, through its President, stated that these men were before the Commission in the capacity of witnesses—not as persons under charges; that they were not on trial, and the Commission would not recognize the right of a witness before it to have an attorney to instruct him how to testify; that the Commission was pursuing this investigation in its own way; that under the law it could hold a public or a private investigation, or that it might investigate through special agents employed for the purpose; that the Commission had decided that this investigation should be open and public, and therefore any person might be present, but that Mr. Gibbs' presence here in the capacity of an attorney for any of the witnesses, while it might be permitted as a matter of courtesy, is not recognized as a matter of right.

The following named witnesses were examined by the Commission, in regard to the conduct of appointees and methods of administration in said District No. 1:

| | |
|--|--------------------|
| James O. Bracken..... | 152 25th St. |
| Wm. Henneberry..... | 1537 State St. |
| Isaac Thompson..... | 143 17th St. |
| Nicholas Meyers..... | 3350 Union St. |
| Charles Mack..... | 2970 State St. |
| Louis Gehrke..... | 3640 Champlain St. |
| Henry Daly..... | 2010 Wabash Av. |
| James Flynn..... | 1475 Michigan Av. |
| George R. Eaton, Timekeeper..... | 218 City Hall. |
| Frank L. Stephenson..... | 1712 Wabash Av. |
| Timothy Crimmins..... | 1351 State St. |
| Wm. D. Kent, Commissioner of Public Works..... | |

The testimony of the witnesses was taken down by a stenographer, and is on file in the office of the Commission. It shows many irregularities, as well as positive violations of law, on the part of the foreman, Bracken, and his assistant, Henneberry.

On May 18th, the following letter was written for the information of His Honor, the Mayor, and addressed to Commissioner Kent, the head of the Department of Public Works:

“CHICAGO, May 18, 1896.

“WM. D. KENT, Esq., Commissioner of Public Works,
City of Chicago.

“*Sir*:—The Civil Service Commission of Chicago is now conducting an investigation under the provision of Section 14 of the Civil Service Act, as to the enforcement of the law and the rules, and the conduct and action of employes in the Classified Service.

“The investigation is still in progress, but there has already been produced evidence that convinces the Commission that James O. Bracken, Foreman of Street Department, District No. 1, and Wm. Henneberry, Asst. Foreman in the same district, have been guilty of conduct that renders them unworthy of membership in the Classified Service.

“Also that Earl Shumway, John McCarthy, Louis Gehrke, John Richards, Michael McNamara, John Sullivan, Henry Daly, James Smidt, John Caldwell and James Moriarity, whose names appear on the rolls of that district, are not working for the city at the present time, and their names should be stricken from the rolls.

“The evidence in the case of each of these men is in the possession of the Commission and subject to your inspection.

Very respectfully yours,

(Signed) JOHN M. CLARK,
President.”

To which the following reply was received:

“CHICAGO, May 19, 1896.

“HON. JOHN M. CLARK, President Civil Service Commission.

“*Dear Sir*:—Referring to your favor of the 18th instant concerning certain employes in the First District, Bureau of Streets, who, in the opinion of your Commission, have been guilty of conduct which renders them unworthy of membership in the Classified Service of the city, I beg to say that their names have been taken from the rolls. In this connection, I beg to say that the names of Earl Shumway, John Richards and Michael McNamara (to which you refer in your letter) were taken from our rolls on April 25th last.

Yours very truly,

(Signed) W. D. KENT,
Commissioner.”

On the afternoon of the 18th, the Commission, with its special counsel, Mr. Mills, had an interview with the Assistant State's Attorney, Mr. Bottum (the State's Attorney, Mr. Kern, being absent from the city), and arrangements were made for having the matter brought to the immediate attention of the grand jury.

On Thursday, the 21st, Mr. Bracken and Mr. Henneberry were indicted for violation of the Civil Service Law and rules.

On May 25th, the following letter was written to the Corporation Counsel:

"CHICAGO, May 25, 1896.

"HON. WM. G. BEALE, Corporation Counsel,
City of Chicago.

"*Sir*:—The Civil Service Commission is now conducting an investigation under the provision of Section 14 of the Act, and a question has arisen as to the payment of workmen who are in the employment of the city and subpoenaed to appear before it as witnesses.

"Section 17 of the Act provides that 'all officers of any city which shall have adopted this Act shall aid said Commission in all proper ways in carrying out the provisions of the Act.'

"Section 6. Referring to employes of the city who are called upon to act as examiners, 'if in the Official Service, it shall be part of their official duty without extra compensation.'

"Section 33 says: 'The fees of witnesses for attendance and travel shall be the same as the fees of witnesses before the circuit courts of this State, and shall be paid from the appropriation for the expenses of the Commission.'

"The Commission would be glad of your official opinion:

"First. As to whether an employe of the city, in either the Official or Labor Service, if subpoenaed before the Commission, shall receive separate pay as a witness, or if his appearance shall be regarded as a part of his official duty, and his pay remain as though at his regular work.

"Second. As to witnesses not in the employ of the city, what is the pay allowed by law for witnesses summoned to appear before the circuit courts of the State?

"An early answer will very much oblige the Commission, as it is obliged to pay witnesses now before it. Very truly yours,

(Signed) JOHN M. CLARK,

President."

To which the following answer has been received:

"CHICAGO, May 26, 1896.

"HON. JOHN M. CLARK,

President Civil Service Commission, City of Chicago.

"*Dear Sir:* Replying to your letter of the 25th inst., I beg to say that in my opinion city officers and employes, who are called to testify before the Commission in respect to any matter properly under inquiry before it, are not entitled to witness fees in addition to their regular compensation. When attending and testifying before the Commission such officers and employes are serving the City as strictly as when pursuing the course of their ordinary employment, and for so attending and testifying they should neither be paid additional compensation nor lose anything of their ordinary compensation. They ought to be reimbursed for any actual expense incurred.

"In my judgment the provision of Section 33 in respect to witness fees was intended to apply only to witnesses outside of the municipal service, at least that seems to me the reasonable interpretation of the provision. The fees of witnesses before the Circuit Court are \$1.00 for each day of actual attendance and five cents for each mile traveled. All witnesses are required to make affidavit as to the number of days' attendance and the number of miles of travel required.

Very respectfully yours,

(Signed) WM. G. BEALE,
Corporation Counsel."

After considerable discussion it was decided that the next investigation entered upon by the Commission shall be affairs in connection with District No. 8, Bureau of Streets, Department of Public Works.

There being no further business the meeting then adjourned.

EDWARD J. PHELPS,

Secretary.

JOHN M. CLARK,

President.

June 1, 1896.

The Civil Service Commission of Chicago met in its office on Monday, June 1st, at 11 A. M. There were present Commissioners Clark, Waller and Hotz, the President in the chair.

The following bills for the month of May were presented, carefully examined, audited and ordered sent to the Comptroller for payment:

| | |
|---|-------------------|
| Cameron, Amberg & Co., Stationery..... | \$ 2 85 |
| Cameron, Amberg & Co., 7,500 Labor applications..... | 56 00 |
| Cameron, Amberg & Co., Stationery..... | 1 15 |
| Miss H. C. Winston, Mimeograph work on examination papers..... | 20 00 |
| Cameron, Amberg & Co., Stationery..... | 1 00 |
| Cameron, Amberg & Co., 2,500 Postal cards and printing..... | 33 85 |
| Cameron, Amberg & Co., 2 Ledgers, Certified List of Employees..... | 25 00 |
| Cameron, Amberg & Co., Stationery..... | 12 25 |
| Cameron, Amberg & Co., Stationery..... | 1 45 |
| Cameron, Amberg & Co., Stationery..... | 1 60 |
| Waukesha Spring Co., Water..... | 3 75 |
| Cameron, Amberg & Co., Indexers and record books... | 32 43 |
| E. J. Phelps, Expense account..... | 14 35 |
| Richard Hubbard, Janitor of Battery D..... | 20 00 |
| Cameron, Amberg & Co., Books for markers' use..... | 4 80 |
| Cameron, Amberg & Co., Record books of examinations and copy books..... | 16 80 |
| Pay Roll for May..... | 2,096 66 |
| | <u>\$2,343 94</u> |

The Secretary was instructed to call an examination at the earliest practicable date for district foremen in the Bureau of Streets, Department of Public Works, Official Service, Division L, 3rd grade; also for original entrance to the police service.

A communication was received from D. J. Swenie, Fire Marshal, in regard to the claim of Silas McBride for services in superintending the construction of an engine house for the Fire Department. Inasmuch as no requisition had ever been made, and no authority given for the appointment of such an officer, it was the unanimous opinion of the Commission that it had no power in the matter.

The following letter was received from the President of the Citizens' Association:

" May 26th, 1896.

" JOHN M. CLARK, ESQ., President Civil Service Commission.

" *Dear Sir:* We have watched the proceedings of your board since its organization, with an interest stimulated by the remembrance that civil service reform has been an object of our solici-

tude since 1883, when we memorialized the Mayor on the subject, following that action up by the introduction of a bill to the Legislature of 1885. We also aided in the passage of the present law. We have observed the difficulties you have encountered in the introduction of the system, advancing as you have, step by step, on untrodden ground.

"It has come to our knowledge that unforeseen embarrassments have recently appeared in connection with the investigation of the city pay rolls.

"It appears to us that the crucial test of the benefits of the system is now at hand. On your success in the present endeavor depends the future of the system in this city, perhaps even the continuance of the law upon the statute book.

"If, therefore, we can be of assistance to you in any way at this juncture, it has become our duty to offer such co-operation and aid as we can afford. If you need such assistance, and will explain to us the nature of the aid required, we shall take great pleasure in immediately considering the subject with a view to furnishing it.

Yours respectfully,

(Signed) J. C. AMBLER,
Secretary.

(Signed) R. J. SMITH,
President."

To which the following reply was made:

"May 27, 1896.

"R. J. SMITH, Esq.,

President Citizens' Association of Chicago, Chicago.

"Sir: I beg to acknowledge receipt of your communication of May 26th, tendering the co-operation and aid of the Citizens' Association of Chicago to the Civil Service Commission in view of the investigations now in progress 'as to the enforcement of the law, and the conduct and action of appointees in the Classified Service.'

"The Commission has received much encouragement from the press and from public spirited citizens in its efforts to secure the due enforcement of the law, and it fully appreciates the value of the co-operation of an old established organization such as the Citizens' Association, which was among the first to advocate the application of the merit system to the municipal administration of Chicago.

"The law not only authorizes the Commission to hold these

investigations, but it positively requires that it shall do so. It is not expected that they will be continuous, but held only from time to time, as occasion warrants. It is desirable that they should be so conducted that they will consume as little as possible of the time of the employes in the departments under investigation, and yet so that all shall know that they are to be thorough and complete, and without fear or favor. For this purpose the advice and assistance of trained counsel is absolutely necessary.

“The Law and Police Departments of the city have been placed at the service of the Commission to any extent required, and members of these departments have rendered, and are now rendering, able and zealous assistance to the Commission.

“The circumstances surrounding these investigations are peculiar; partisan and factional interests are involved; personal, political and even race prejudices are aroused, and it is possible that a failure in any instance to accomplish expected results would subject all engaged in it to unfair and unjust criticism, and thus perhaps tend to defeat the purpose of the law. For this reason it seems desirable that the Commission should, in addition to the aid furnished by officials in the employ of the city, have the services of at least an attorney in no way connected with the city administration. The Mayor and the Corporation Counsel have both expressed an earnest wish that this might be done.

“The limited appropriation made by the City Council for the use of the Commission during the present fiscal year renders it impossible that an adequate expenditure be made for this purpose. It is even doubtful if the money appropriated for the Commission will be sufficient to pay the cost of the examinations that the law requires shall be held, and of the stationery and office expenses connected therewith.

“In response to your inquiry I would therefore suggest that the most efficient way in which the Citizens' Association could aid the Commission at this time would be in placing at its disposal the services of a competent legal adviser, one whose training and experience would especially fit him for the work, and one in whose ability and fairness the Association and the public would have confidence.

Very respectfully yours,

(Signed) JOHN M. CLARK,

President.”

On May 29th the following letter was received:—

“May 29, 1896.

“JOHN M. CLARK, Esq.,

President Civil Service Commission.

“*Dear Sir:*—In pursuance of our correspondence the executive committee have retained the services of Luther Laffin Mills as counsel in the pending investigations.

Yours respectfully,

(Signed) J. C. AMBLER,

Secretary.”

The Secretary reported that, in conformity with instructions given at meeting of May 25th, Mr. John Mattocks, of 2704 Indiana Avenue, who stood highest on the list of eligibles for clerks, had accepted the position offered him, and began work this day, with a salary at the rate of \$800.00 per year.

Also that the following persons had been employed as examiners:—

| | | |
|-------------------------------------|-------------------|--|
| Miss Annie M. Mellen..... | 861 Sawyer Av. } | |
| Miss Annie Sepple..... | 691 E. 57th St. } | at \$3.00 per day. |
| Miss Katharine F. Stillwell.... | 1843 Barry Av. } | |
| Mr. John Powell...289 Paulina St. } | | at the rate of \$5.00 per day for ser- |
| Mr. Hector Durante...45 16th St. } | | vices at examination of laborers. |

There being no further business the meeting then adjourned.

EDWARD J. PHELPS,

Secretary.

JOHN M. CLARK,

President.

June 4, 1896.

The Civil Service Commission of Chicago met in its office, No. 115, City Hall, on June 4th, at 11 A. M.

Present: Commissioners Clark, Waller and Hotz, the President in the chair.

In accordance with the decision of the Commission, an investigation was held as to the enforcement of the law and the rules, and the conduct and action of appointees in the Classified Service in

the 8th District, Bureau of Streets, Department of Public Works. The following summary of the proceedings is submitted for the purpose of record by the President:—

The investigation was begun on the morning of May 25th. All of the Commissioners were present. Mr. Frank Hamlin, of the City Law Department, had been detailed by the Corporation Counsel to assist the Commission. The services of Mr. Luther Laffin Mills were placed at the disposal of the Commission through the courtesy of the Citizens' Association of Chicago, without expense to the city.

The investigation continued during four days, at each of which all of the Commissioners were present.

The following witnesses were examined:—

| | |
|--|---------------------|
| Wm. Baumer, Foreman..... | 492 Wells St. |
| Henry Schuster, Asst. Foreman..... | 359 Clybourn Av. |
| Joseph Geary, Timekeeper..... | 462 Clark St. |
| Mathew Mulcahy..... | 87 Gardener St. |
| Adam Kreshner, Laborer..... | 61 Beethoven Place. |
| James Brown, Carpenter..... | 126 Siegel St. |
| Frank Thalstrom, Carpenter..... | 18 Vine St. |
| John Schultz, Carpenter..... | 53 Reese St. |
| Patrick Farrell, Laborer..... | 340 Cleveland Av. |
| John Daly, Laborer..... | 11 Grove St. |
| Julius Reimer, Laborer..... | 531 Wieland St. |
| Samuel J. Hallock, Carpenter..... | 271 Fremont St. |
| Amos E. Barthen, Laborer..... | 88 Mohawk St. |
| Joseph Lachner, Laborer..... | 123 Townsend St. |
| Fred Busse, Contractor..... | 504 Clark St. |
| G. A. Busse..... | 504 Clark St. |
| George R. Eaton, Clerk Timekeeper in Supt.'s office, | 218 City Hall. |
| Fred P. Baird..... | Teutonic Bldg. |
| Mrs. J. Ryan..... | City Hall. |
| Charles F. Gross..... | 554 W. 67th St. |
| Samuel A. Low, of Smith & Low..... | 100 Washington St. |

The evidence, taken by a court reporter and a typewriter, is on file in the office of the Commission.

The following report of the investigation was made to the Mayor:—

“May 29, 1896.

“HON. GEO. B. SWIFT,

Mayor of Chicago.

“*Sir*:—The Civil Service Commission of Chicago, under and by virtue of Section 14 of the Civil Service Act, has conducted an investigation as to the ‘enforcement of the law, and the conduct and action of appointees in the Classified Service,’ holding positions in the Street Department, District No. 8, Department of Public Works.

"From evidence produced at such investigation, the Commission is of the unanimous opinion that Wm. Baumer, foreman of the said district, has been guilty of direct violation of the law in connection with the performance of his duties as such foreman; and that the conduct and action of the following persons, whose names appear on the pay roll of the said District No 8, have shown that they have not properly performed their duties as employes of the city, and also, in the judgment of the Commission, have suppressed the truth in their statements, and neglected and declined to assist the Commissioners in the said investigation:—

| | |
|------------------------------------|---------------------|
| Henry Schuster, Asst. Foreman..... | 492 Wells St. |
| Joseph Geary, Timekeeper..... | 462 Clark St. |
| James Brown, Carpenter | 126 Siegel St. |
| Adam Kreshner, Laborer | 61 Beethoven Place. |
| Julius Reimer, Laborer | 531 Wieland St. |
| Joseph Lachner, Laborer..... | 123 Townsend St. |
| Frank Renshaw, Laborer..... | 58 Goethe St. |

"The Civil Service Commission is convinced, from the evidence presented, that the above named persons are unworthy of membership in the Classified Service of Chicago, and would respectfully recommend that they be discharged therefrom.

"There are some matters pertaining to the investigation of the 8th District that are not yet concluded, and further report touching the same may be made should evidence yet to be produced justify it.

"All the evidence produced before the Commission is on file in its office and subject to your inspection at any time.

Respectfully submitted,

CIVIL SERVICE COMMISSION,

(Signed) JOHN M. CLARK,

President."

All the men named in the communication were discharged from the service on June 3rd.

The Commission decided that its next investigation would be as to the condition of affairs in the 6th District, Bureau of Streets.

There being no further business the meeting then adjourned.

EDWARD J. PHELPS,

Secretary.

JOHN M. CLARK,

President.

June 15, 1896.

The Civil Service Commission of Chicago met in its office, room 115, City Hall, on Monday, June 15th, at 11 A. M.

There were present Commissioners Clark, Waller and Hotz, the President in the chair.

The minutes of the last three meetings were read and approved.

The Secretary reported that the copies of the printed rules of the Commission had all been given out to the public, and that he was daily in receipt of requests for them and thought a new supply should be ordered.

The President stated that before having the rules printed there were some additions and minor changes that, in his judgment, might be made with advantage. The subject has frequently been considered by the Commissioners, and, after a full discussion of the matter, the following changes and amendments to the rules were agreed upon:

On motion of Commissioner Hotz, seconded by Commissioner Waller, the rules of the Commission were altered and amended as follows:

RULE I.

SECTION 2. Add the following sentence: "The Commission will decide as occasion may require in which class and division any particular office or place of employment shall belong."

Add new section to be known as Section 5, as follows:

"Any two or more of the grades herein established in any division may be grouped together and treated as one grade for the purpose of facilitating examinations for original entrance to the service or for promotion therein. Such action shall be taken only by a vote in the affirmative of all three Commissioners, and a record thereof shall be made in the minutes of the proceedings of the Commission. Action so taken shall remain in force until rescinded or amended at some subsequent meeting of the Commission by vote of all three Commissioners, and a record of the same shall be made in the proceedings of the Commission."

Change the number of Section 5, as printed in the rules, to Section 6.

RULE IV.

SECTION 6. Add to Section 6 the following words: "and of such minimum mark as may be fixed by the Commission for any part thereof."

RULE VII.

Add new section to be known as Section 5, as follows:

"Should the work for which a probationer has been certified prove temporary, and he be laid off without fault or delinquency on his part before his time of probation is completed, his name shall be restored to its position at the top of the register of eligibles, and the term he has served shall be credited to him on his probationary period."

Change the number of Section 5 as printed in the rules, to Section 6, and add the following words to the same: "In case of exigency an employe may be temporarily assigned without extra pay to other than his regular duties. But no such assignment shall be for a period of more than ten days without the consent in writing of the Commission thereto."

RULE VIII.

SECTION 1. Amend by changing the wording of the second sentence of the section as printed to read as follows: "Competition in such examinations shall be limited to the employes in the next lower grade of the same division serving in the department in which the position exists, unless the Commission shall deem it for the interest of the service to admit to competition employes in other grades or other divisions serving in that or other departments."

Amend by substituting Section 4 to take the place of old Section 4, as follows:

"Examinations for promotion will be held in any division, or of the employes in any division serving in any department, when in the opinion of the Commission the interests of the service shall require.

"Applications must be recorded by the applicant in person in a book provided for that purpose in the office of the Commission at least three (3) whole days before the date fixed for the examination.

"Notice of examinations for promotion will be published as the law directs, and notice will also be posted in the office of the Commission and in the office of the department in which the promotions are to be made, giving date and character of the examinations and defining who are eligible to take the same."

SECTION 8. Amend by inserting after the words "70 per centum", "of complete proficiency in the subjects of the examination taken as a whole, and of such minimum mark as may be fixed by the Commission for any part thereof."

SECTION 10. Amend by striking out the words "at least" in the fifth line, and by adding at the end of the section the words "A name that has been certified three separate times and not selected by the appointing officer shall be removed from the list of eligibles."

RULE X.

SECTION 4. Amend by adding the following: "and is holding his position in accordance therewith."

Change the numbering of the printed rules as follows:

| Rule No. XXII | to Rule No. XIII. |
|---------------|-------------------|
| XXIII | XIV. |
| XIII | XV. |
| XIV | XVI. |
| XV | XVII. |
| XVI | XVIII. |
| XVII | XIX. |
| XVIII | XX. |
| XIX | XXI. |
| XX | XXII. |
| XXI | XXIII. |

RULE XVI.

SECTION 1. Amend by striking out the sentence beginning with the word "Foreman" in the twentieth line from the top.

RULE XIX.

Amend by adding the following new Sections 2 and 3.

"SECTION 2. Foremen whose positions are reasonably permanent and whose duties are responsible and important, will as a rule be regarded as in the Official Service, and vacancies will be filled as occasion may require through examination for promotion, or for original entrance, as the Commission may at the time decide.

"SECTION 3. Promotion from the ranks. Whenever practicable, the position of foreman not in the Official Service, assistant foreman, head laborer or gangman, shall be filled by promotion from the ranks. Such promotion shall be on the basis of ascertained merit and seniority, and upon the record as to efficiency, sobriety, and ability shown in the public service.

"The head of the department in which the promotion is to be made shall nominate to the Commission the person in the service of

that department or bureau, who, in his judgment, on the basis above given is best entitled to the promotion, and on the written approval of the Commission the promotion shall be made.

“When it is found impracticable to fill any such place by promotion the Commission will hold open examination for the same.”

Amend by changing the number of Section 2, Rule XIX, as printed, to Section 4.

The Secretary was instructed to insert the statutory advertisement and give necessary notices of changes in the rules, and to secure bids from at least six of the prominent printing establishments in Chicago for printing 5,000 copies of the rules as amended, 500 copies of which shall be bound in cloth.

There being no further business the meeting then adjourned.

EDWARD J. PHELPS,
Secretary.

JOHN M. CLARK,
President.

June 17, 1896.

The Civil Service Commission of Chicago met in its office, room 115, City Hall, on Wednesday, June 17th, at 11 A. M. Present: Commissioners Clark, Waller and Hotz, the President in the chair.

The following communication was presented from the Commissioner of Health:

“June 6, 1896.

“JOHN M. CLARK, Esq.,
President Civil Service Commission, City.

“*My Dear Sir:*—A request having been made upon me by Dr. A. C. Cotton, City Physician, to transfer H. S. Warren, M. D., of the Department of Health, to his department, he to occupy the position of Assistant City Physician, I would respectfully ask that the Civil Service Commission give its approval thereto. The positions are in the same division. The grades, however, are different, he being reduced from grade seven to grade four.

Very respectfully yours,

(Signed) WM. R. KERR,
Commissioner of Health.”

As the transfer asked for seems to be manifestly in the interest of the public service, and is in conformity with the general interest and spirit of the rules, the following reply was made by order of the Commission:

“June 16, 1896.

“HON. WM. R. KERR,

Commissioner of Health, City of Chicago.

“*Dear Sir*:—The Commission begs leave to acknowledge the receipt of your communication of June 6th, asking its approval of the transfer of H. S. Warren, M. D., of the Classified Service, Division A, Grade 7, Department of Health, to the position of Assistant City Physician, a position in the same department and same division, but in a lower grade (grade 4).

“The reason of this transfer is understood to be that the City Council, in the present appropriation bill, failed to make any appropriation for the position in the seventh grade now held by Dr. Warren.

“As the examination for the two positions would be substantially the same, the Commission hereby approves of the transfer as requested.

Very respectfully yours,

(Signed) JOHN M. CLARK,

President.”

The following letter to the Commissioner of Public Works was sent by order of the Commission:

“June 17, 1896.

“HON. WM. D. KENT,

Commissioner of Public Works, City Hall.

“*Dear Sir*:—I beg to acknowledge receipt of your requisition, No. 33, dated June 4th, for a clerk in Special Assessment Bureau, Department of Public Works, at a salary of \$105.00 per month (\$1,260.00 per annum), and to state that the matter has been considered by the Commission.

“The position is in the fourth grade, and, in accordance with the law, must, if practicable, be filled by promotion. In order that the Commission may determine whether it is practicable so to fill it, will you kindly send a list of the clerks of the next lower grade (the third), now serving in the Department of Public Works?

“If the number in that department shall prove to be so small as to render it impracticable to limit the examination to them, then the Commission may decide, in the interests of the service, to throw it open to all clerks in the third grade serving in any of the departments, or, if necessary, to the public.

Very respectfully yours,

(Signed) JOHN M. CLARK,
President.”

In view of examinations for promotion that it is expected will soon be required in the departments of Police and Fire, the following letter was written on April 15th, 1896, to the Superintendent of Police, and a copy also sent to the Chief of the Fire Department, asking their opinions in regard to certain features of such examination:

“April 15, 1896.

“HON. JOHN J. BADENOCH,
General Superintendent of Police, Chicago.

“*Dear Sir:*—Assuming that an examination for promotion in the different grades of the police service will soon become necessary, and in order that preparation may be made for holding the same, the Civil Service Commission would be glad of information from you upon certain technical points for its guidance.

“Section 9, of the Civil Service Act, covering the general subject of promotions, states that they shall be made ‘on the basis of ascertained merit and seniority in the service and examination.’ In regard to examination, reference is made to the section which covers the general subject of examinations (Section 6), which provides that ‘such examinations shall be practical in their character, and shall relate to those matters which shall fairly test the relative capacities of the persons examined to discharge the duties of the position to which they seek to be appointed, and shall include tests of physical qualifications and health, and when appropriate, of manual skill.’

“The points upon which information is desired are:

“First. Is there any official record kept in the Police Department from which the relative merits of the applicants may be ascertained?

“Second. Should the educational qualifications be increased as the higher grades of the service are reached?

“Third. Is there any test of manual skill that you would suggest as appropriate for the examination?

“Fourth. Do the higher positions in the Police Department, as a rule, demand better health and physical qualifications than the lower ones?

“Fifth. In regard to the ‘tests of physical qualifications and health,’ all applicants for promotion will undergo examination before the Medical Board employed by the Commission. The Medical Board is fully competent to pass upon the physical conditions and health of an applicant, but without expert information it may not be able to decide whether an applicant who may perhaps be found with some form of disease, would be able to discharge the duties of the advanced position in which a promotion would place him. To enable it to decide in such cases, it would be glad to have the expert opinion of your department as to whether any of the following reasons should be deemed sufficient to disqualify for promotion:

“(a) Seriously impaired eyesight.

“(b) Deafness.

“(c) Extreme corpulency.

“(d) Rupture.

“(e) Evidence of extreme use of stimulants.

“(f) An incurable disease, such as Bright’s disease, consumption, heart disease, cancer, etc., which, though not yet so advanced as to necessitate retirement from the service, is reasonably certain to do so within a limited time.

“(g) Manifest indications of any of the above diseases, though the disease itself may not yet be fully developed.

“It is not expected that the physical examination for promotion will be as severe as that for original entrance to the service, but the Medical Board should be informed as to the duties of the positions to be reached by promotion, in order that it may know to what extent health and physical qualifications should be considered, and any general information that you may be able to give on the subject will be of great assistance to it.

Very truly yours,

(Signed) JOHN M. CLARK,
President.”

No reply has as yet been received from the Superintendent of Police, but the following answer has been received from the Chief of the Fire Department:

“June 9, 1896.

“CIVIL SERVICE COMMISSION,
Chicago.

“*Gentlemen*:—Referring to your letter of May 9th, requesting information for promotion in this department, my reply to your numbered interrogatories is as follows:

“First. An official record is kept in this department from which the merits of applicants can be obtained.

“Second. The educational requirements should be increased as the higher grades are reached.

“Third. No test of manual skill is necessary in examinations for promotions in this department.

“Fourth. Good health is necessary to satisfactorily fill any position in this department. The physical demands are no greater in the higher grades than in the lower.

“Fifth. Seriously impaired eyesight, deafness, extreme corpulency or the excessive use of stimulants, would render a man unfit for active duty in this department and should disqualify him for promotion. The physical disability contemplated in this answer is such as would disqualify a man for any active pursuits. Rupture and the so called incurable diseases such as Bright's disease, consumption, etc., should be considered with reference to the present condition of the subject and probable progress of the disease. It is to be presumed that men applying for promotion in this department are in fair physical condition, or they would not be on duty, and in case of permanent disability they would be on the retired list, and a man should not be debarred from reaping the reward of years of faithful service merely because of symptoms of a disease which may some day incapacitate him. This is especially true where there is a probability that the disease in question is due to exposure while in the performance of duty. To require physical perfection of the older members of the department would discourage faithful workers and offer a premium to the shirks.

“While on this subject I wish to call your attention to the radical difference between promotion from one class to another and promotions in official rank. The former involves no additional qualifications or responsibilities. The increase of pay is designed

as the reward of length of service and presumed increased efficiency and hitherto was given as a matter of course whenever the member had served the required time (one year) in the lower grade, provided vacancies existed in the next higher class.

“Membership in the first class is based on service in the business district, and applies to officers and privates alike. Tests for promotions of this character should in my opinion be made as light as the law will permit.

“Promotions to the rank of Engineer, Lieutenant, Captain or Assistant Fire Marshal stand on an entirely different basis. These positions call for higher qualifications and increased responsibilities, and examinations should be of such a character as to insure the selection of the most available material to fill them. Wide experience as firemen, executive ability and capacity to command and control men, are imperatively necessary for the proper discharge of the duties of a Captain or Assistant Fire Marshal, and no man should be placed on the eligible list until he has given satisfactory evidence that he possesses them.

Respectfully yours,

(Signed) D. J. SWENIE,

Fire Marshal.”

In view of the above letter from Chief Swenie, representing views based upon long experience in the Fire Department, and after consultation with the Medical Board, the following resolution, covering the whole question of physical examination for promotion in all departments of the service, was offered by Commissioner Hotz, seconded by Commissioner Waller, and adopted by a unanimous vote:—

“*Resolved*, That in all examinations for promotion in the Classified Service the test of physical qualification and health as required by law shall be governed by the following considerations:—

“First. Is the applicant physically qualified for the duties he is now performing?

“Second. In case the requirements of the position to which he seeks promotion are more exacting than those of the position he now fills, is he physically qualified to perform them?

“In all cases where in the opinion of the Medical Board affirm-

ative answers can be made to these two questions, the candidate will be considered entitled to promotion so far as his physical condition is concerned."

There being no further business the meeting then adjourned.

EDWARD J. PHELPS,

Secretary.

JOHN M. CLARK,

President.

June 24, 1896.

The Civil Service Commission of Chicago met in its office, No. 115, City Hall, on Wednesday, June 24th, at 1 p. m.

Present: Commissioners Clark, Waller and Hotz, the President in the chair.

The President reported that, in conformity with instructions of the Commission, the Secretary had invited bids for printing the rules from the following firms:—

Geo. E. Cole & Co., Cameron, Amberg & Co., S. D. Childs & Co., Geo. E. Marshall & Co., P. F. Pettibone & Co., J. M. W. Jones Printing Co., Rand, McNally & Co., W. B. Conkey Co., R. R. Donnelly & Sons, W. J. Jefferson Printing & Pub. Co., Knight, Leonard & Co., and Regan Printing House.

That the bids from these firms were as follows:—

| | | | |
|--------------------------|----------|---------------------|-----------------------|
| S. D. Childs & Co . . . | \$293 00 | More or less pages, | \$3 65 per page. |
| Wm. B. Conkey Co. . . | 300 00 | " " " " | 17 00 for 4 pages. |
| Regan Printing House | 264 00 | " " " " | 2 65 per page. |
| P. F. Pettibone & Co. | 250 00 | " " " " | 2 25 with conditions. |
| Cameron, Amberg & Co. | 250 00 | " " " " | 3 00 per page. |
| J. M. W. Jones Co. . . . | 350 00 | " " " " | various per page. |

The bid of P. F. Pettibone & Co. would be the lowest were it not for the conditions attached to the same, such as extra charges of 50 cents per hour for alterations, etc., etc.

The bid of Cameron, Amberg & Co. being the same as that of Pettibone & Co. for the main work, and without conditions, is believed to be the lowest, and on motion of Commissioner Hotz, seconded by Commissioner Waller, it was ordered that the contract be awarded to them.

The President stated that the accumulation of work in the hands of the Board of Markers, owing to the large number of candidates at

the recent examinations, makes it desirable that the force should be increased in order that the work can be done more rapidly and information of the result of the examinations forwarded to candidates without long delay.

On motion of Commissioner Waller, seconded by Commissioner Hotz, it was ordered that Mr. Lewis P. Frost, 17 Tree Studio Building, Miss Mary D. Spaulding, 5723 Monroe Av., Miss Cora M. Gettys, 5855 Wright St., and Mrs. Hattie F. Robinson, 2622 South Park Av., be employed temporarily at a salary of \$3.00 per day for each day's work.

There being no further business the meeting then adjourned.

EDWARD J. PHELPS,

Secretary.

JOHN M. CLARK,

President.

June 26, 1896.

The Civil Service Commission of Chicago met in its room, No. 115, City Hall, on Friday, June 26th, 1896. There were present Commissioners Clark, Waller and Hotz, the President in the chair.

The President stated that, as decided by the Commission at its meeting of June 4th, an investigation has been held of the affairs of the 6th District, Bureau of Streets, Department of Public Works.

The investigation was begun in the ante-room of the Council Chamber on June 4th, and occupied most of the time of the Commission during the three succeeding days. During a portion of the time Commissioner Waller was unavoidably absent, on account of sickness and death in his family. He has since read the testimony taken during the time of such absence.

The following witnesses were examined:—

| | |
|------------------------|---------------------|
| Joseph Dost..... | 901 Washtenaw Av. |
| Charles Bellak..... | 836 Girard St. |
| Benjamin Owen..... | 1001 Des Moines Av. |
| Wm. C. Brink..... | 765 N. Lincoln Av. |
| John Thurkow..... | 929 California Av. |
| George A. Lutus..... | 790 Mozart Place. |
| Fred Tellison..... | 930 Mozart St. |
| Jeremiah Clifford..... | 318 Courtland St. |
| Wm. Enderlie..... | 1171 Milwaukee Av. |
| Christ Zeise..... | 256 Courtland St. |

| | |
|-------------------------|----------------------|
| Henry Wermes..... | 378 North Holman Av. |
| Dan McMahon..... | 804 Holt Av. |
| Frank B. Caviezal..... | 302 Courtland St. |
| George R. Eaton..... | 6209 Princeton Av. |
| Wm. McClure..... | 413 Roscoe Boulevard |
| Fred C. Wheaton..... | Jefferson Park. |
| Wm. A. Klee..... | 1315 Oakdale Av. |
| Thomas J. Smith..... | 18 Laffin St. |
| Frank J. Thalstrom..... | 18 Vine St. |
| Nic Lauer..... | 42 Mohawk St. |
| Alfred Benson..... | 2301 Indiana Av. |
| Alfred Cunningham..... | 1129 W. Polk St. |
| Alonzo F. Williams..... | 1054 W. Monroe St. |
| Joseph Bromstedt..... | 534 79th Place. |
| August Marquardt..... | 3208 La Salle Av. |
| Charles Paetow..... | 5227 Laffin St. |
| Samuel B. Freud..... | 509 South Morgan St. |
| John Morfa..... | 4047 Waller St. |

The evidence was taken down by a competent reporter, and is on file in the office of the Commission.

After careful consideration of the evidence, the Commission made the following report to Mayor Swift:—

“ June 27, 1896.

“ HON. GEO. B. SWIFT,
Mayor of Chicago.

“ *Sir*:—The Civil Service Commissioners, under authority of Section 14 of the Act, have conducted an investigation ‘as to the enforcement of the law, and the conduct and action of appointees in the Classified Service’ in connection with District No. 6, Bureau of Streets, Department of Public Works.

“ From evidence produced at said investigation the Commission is of the unanimous opinion that the conduct and action of Frank B. Caviezal, foreman of said district, and Wm. C. Brink, an employe therein, has been such as to render them unworthy of membership in the Classified Service of Chicago, and would recommend that they be discharged therefrom.

Very respectfully yours,

(Signed) JOHN M. CLARK, }
“ ROBT. A. WALLER, } Civil Service
“ CHRISTOPH HOTZ, } Commissioners.”

There being no further business the meeting then adjourned.

EDWARD J. PHELPS,
Secretary.

JOHN M. CLARK,
President.

July 1, 1896.

The Civil Service Commission met in its office, No. 115, City Hall, on Wednesday, July 1st, at 11 A. M. There were present Commissioners Clark, Waller and Hotz, the President in the chair.

The President called attention to the fact that the term of Commissioner Hotz as a member of this Commission would expire at 12 M. this day, he having been appointed July 1st, 1895, on the organization of the Commission, for the term of one year.

The President with much pleasure announced that Mr. Hotz had been reappointed to be his own successor as Civil Service Commissioner, for a full term of three years; that the said appointment was formally announced by His Honor, Mayor Swift, to the City Council at its meeting on the evening of June 29th; and Mr. Hotz having taken an oath of office before the City Clerk, this official recognition of his renewed membership in the Commission is made a matter of record.

The President of the Commission having been elected at the meeting held July 1st, 1895, for a term of one year, it was deemed proper that an election should be held at this meeting for his successor.

On motion of Commissioner Waller, seconded by Commissioner Hotz, Commissioner Clark was re-elected President of the Commission to serve for one year and until his successor is elected and qualified.

The minutes of the meetings of June 4th, 17th, 24th and 26th were read and approved.

The President stated that the question had often been raised as to whether it would not be desirable for the Commission to adopt an official seal; and also the question as to whether the rules ought not to be so amended as to restrict membership in the Classified Service to actual residents of Chicago, as they now do applicants for examination; that he had on June 15th addressed the following letter to the Corporation Counsel:—

“June 15, 1896.

“WM. G. BEALE, ESQ.,

Corporation Counsel, City of Chicago.

“*Dear Sir:*—The following questions have arisen, upon which the Civil Service Commission respectfully asks your official opinion:—

"First. In view of the fact that the Commission is frequently called upon to subpoena witnesses to testify before it in investigations held in pursuance of the law, and to make certification of official papers, it has seemed desirable that it should, if consistent with the law, adopt an official seal. Would it be authorized in doing so?

"Second. The law provides—Section 3: 'The offices and places so classified by the Commission shall constitute the Classified Civil Service of such city; and no appointments to any of such offices or places shall be made except under and according to the rules hereinafter mentioned.' And also in Section 6, that 'All applicants for offices or places in said Classified Service, except those mentioned in Section 11, shall be subjected to examination, which shall be made public, competitive and free to all citizens of the United States, with specified limitations as to residence, age, health, habits and moral character.'

"The rules provide—Rule II, Section 1: 'No person shall be admitted to examination for any position in the Official Service who is not a citizen of the United States, and who has not been an actual resident of the City of Chicago for at least one year next preceding the date of the examination.'

"It is now proposed to so amend the rules as to require that the limitation of residence in the City of Chicago shall continue to apply to all persons while they remain members of the Classified Service.

"Your official opinion is asked as to whether the Commission has the power, under the law, to impose this additional requirement.

Very respectfully yours,

(Signed) JOHN M. CLARK,
President."

To which the following reply has been received:

"June 27th, 1896.

"HON. JOHN M. CLARK,

President Civil Service Commission, City of Chicago.

"*Dear Sir:*—In response to the inquiries contained in your letter of the 15th inst., I beg to express my opinion as follows:

"First. I do not see any legal impropriety in the adoption and use of an official seal by the Commission, but I do not think there would be any legal import in its so doing. The law does not affirmatively authorize such a seal. In this sense, and only in this sense,

it would be unauthorized. The Commission not being a corporation, and not being thus authorized to use a seal, there could be no legal advantage derived from one. It would be legally useless for any purpose. Having no legal effect it could hardly lend any official dignity or solemnity to any papers, and it might even have the contrary effect because of its lack of legal import. My own view is that it would be better for the Commission not to adopt this useless form, but I do not know of any particular objection to it.

“Second. I can find nothing in the law authorizing the Commission to make a residence limitation applicable to city officers or employes after they have actually entered the service of the city, and I am clearly of the opinion that the Commission is without such authority. Such a limitation imposed by the Commission could be ignored by heads of departments and bureaus. Perhaps, however, the purpose which I assume the Commission has in mind can be equally well accomplished by a rule providing that the removal of residence from the city will be regarded by the Commission as sufficient cause for discharge in all cases under the 12th Section of the Civil Service Law. I suggest this for your consideration.

Very respectfully yours,

(Signed) WM. G. BEALE,
Corporation Counsel.”

The President submitted an itemized list of the expenditures of the Commission during the month of June as follows:

| | |
|--|------------|
| Cameron, Amberg & Co., Stationery bills..... | \$ 37 70 |
| Truax, Greene & Co, Bottles and medical instruments..... | 4 81 |
| E. J. Phelps, (Expense Acc't.) Witness fees in the investigation of the 1st and 6th Districts..... | 17 60 |
| Dispatch, Advertising..... | 2 34 |
| A. G. Spalding & Co., Parallel bars for police and fire examinations..... | 35 00 |
| Hattie A. Shinn, Reporting and transcription for 6th District..... | 193 00 |
| Pay Roll..... | 2,358 16 |
| W. R. Northway, Pay Roll..... | 35 00 |
| James B. Smith, Pay Roll..... | 20 00 |
| Dietrich Helberg, Cleaning up after examination..... | 2 00 |
| | <hr/> |
| | \$2,705 61 |

The items on the list were carefully considered, audited, approved, and ordered sent to the Comptroller for payment.

There being no further business the meeting then adjourned.

EDWARD J. PHELPS,
Secretary.

JOHN M. CLARK,
President.

July 3, 1896.

The Civil Service Commission of Chicago met in its office, No. 115, City Hall, on Friday, July 3rd, at 11 A. M. There were present Commissioners Clark, Waller and Hotz, the President in the chair.

The President called attention to the fact that two requisitions had been received from the Commissioner of Public Works, each of which, will under the law, have to be filled by promotion if found practicable.

The first was a position in Division C, 4th grade, the vacancy being in the Bureau of Special Assessments.

The second was the position of Asst. Supt. of Water Pipe Construction, a position that under the classification is in Division L (Miscellaneous) and in the 7th grade.

In regard to the first of these positions, the promotion of a man from 3rd to 4th grade will leave a vacancy in the 3rd grade that will have to be filled by promotion.

In accordance with the rules the examination will be open to employees in that division serving in the Department of Public Works; a report having been asked from the Commissioner as to their number.

In a communication dated June 19th, he gives a list of names of the clerks, about forty in number, in that Department and Division who would be eligible. This number being regarded by the Commission as sufficiently large to render an examination for promotion practicable, on motion of Commissioner Waller, seconded by Commissioner Hotz, it was ordered that examinations for promotion be held in the Council Chamber as follows:

First. On Tuesday, July 21st, at 10 A. M., of all members of the Classified Service holding positions in the 1st or 2nd grades, Division C (Clerical Service), serving in the Department of Public Works, for promotion to 3rd grade.

Second. On Wednesday, July 22nd, at 10 A. M., of all members of the Classified Service holding positions in the 3rd grade (Clerical Service), serving in the Department of Public Works, for promotion to 4th grade.

In regard to the requisition for promotion in Division L, the Commissioner of Public Works had been requested to send a list of names of employees in the Classified Service in his Department, Division L, in the grades lower than that in which the vacancy exists. On June 30th he furnished a list of about eighty names.

The men serving in all of the departments who came into the

Classified Service under operation of the law, were appointed under the old system without examination. As the position to which a man was appointed depended upon the amount of influence he could bring to bear, it is entirely probable that some of the most competent men may be found filling the lowest positions.

As the vacant position is of high grade, and should be filled by promotion of the brightest and most competent man to be found in the service in any of the lower grades, it was thought best to open this examination to all appointees above the entering grade.

On motion of Commissioner Hotz, seconded by Commissioner Waller, it was ordered that until further action be taken by the Commission, the 1st and 2nd grades, Division L, be grouped together, and be regarded as the entering grade for that division; that certification be made as vacancies may occur to positions in either the 1st or 2nd grade, and that all persons serving in either of said grades be equally eligible to enter an examination for promotion to the higher grade. Also that grades 3, 4, 5 and 6, Division L, be grouped together and considered as one grade, so far as promotions are concerned, and that all persons who have passed an examination, either original entrance or promotion, and stand on an eligible list for this grade, will be certified for appointment in the order of their standing, as vacancies may occur in either the 3rd, 4th, 5th or 6th grades. If appointed in either of the lower of these grades they can, on a vacancy occurring, be advanced up to but not above the 6th grade. Such advance shall be made on requisition and recommendation of the head of the department and the written approval of the Commission without further examination; and that all persons serving in either the 3rd, 4th, 5th or 6th grades, Division L, shall be equally eligible to enter an examination for promotion to the 7th grade. Carried by a unanimous vote.

On motion of Commissioner Hotz, seconded by Commissioner Waller, it was ordered that an examination, open to all members of the Classified Service holding positions in Division L and serving in the Department of Public Works, in either the 1st or 2nd grades, for promotion to the 3rd grade, be held in the Council Chamber on Thursday, July 23rd, at 10 A. M.; also of all persons holding positions in either the 3rd, 4th, 5th or 6th grades, serving in the Department of Public Works, Division L, for promotion to the 7th grade, in the Council Chamber on Friday, July 24th, at 9 A. M.

The Secretary was instructed to insert the statutory advertisement, post the necessary notices, and to make all arrangements for holding the said promotion examinations. Carried.

There being no further business the meeting then adjourned.

EDWARD J. PHELPS,
Secretary.

JOHN M. CLARK,
President.

July 6, 1896.

The Civil Service Commission of Chicago met in its office on Monday, July 6th, at 3 P.M. There were present Commissioners Clark, Waller and Hotz, the President in the chair.

The President submitted a report from its Board of Investigation in the Police Department, on the case of Elmer A. Stiles, a probationer, who had been called before the Board charged with "intoxication and use of coarse and insolent language to a citizen." The evidence produced at the hearing was submitted to the Commission, and Mr. Phelps, Secretary and Chief Examiner, was present during the investigation. Mr. Stiles was given full opportunity to be heard and to have present all witnesses that he desired to testify in his behalf, and has also been before the Commission and made a statement in his own defense. The Board of Investigation unanimously recommend that Mr. Stiles be dismissed from the service and ask the approval of the Commission.

After examination of the evidence and full consideration of the case, the Commission unanimously approved the recommendation of its investigating board, and the Secretary was instructed to notify the Superintendent of Police of its action.

There being no further business the meeting then adjourned.

EDWARD J. PHELPS,
Secretary.

JOHN M. CLARK,
President.

July 31, 1896.

The Civil Service Commission of Chicago met in its office, room 115, City Hall, on Friday, July 31st, 1896, at 11 A. M. There were present Commissioners Clark, Waller and Hotz, the President in the chair.

The Secretary reported that, in accordance with instructions, he had notified Mr. Keohane that his name has been stricken from the list of eligibles for mining inspectors, under provision of Rule III, Section 6.

Mr. Keohane has been before the Commission on two different occasions, and other persons have appeared in his behalf. The Commission believed that some of the statements made in his application paper were false and made for the purpose of misleading the Commission. The order to strike the name from the list of eligibles was carried by a unanimous vote.

The Secretary reported that the new edition of the rules, amended as ordered at the meeting of June 15th, had been received from the printer and are being distributed to the public. The rules as printed have been carefully reviewed and no errors discovered.

On motion of Commissioner Waller, seconded by Commissioner Hotz, the rules as printed were formally adopted, to take effect August 1st.

Carried by a unanimous vote.

The Secretary presented the case of Mr. Thos. Devitt, a patrolman serving on probation, who was certified for appointment on April 1st, 1896.

He had been called before the Board of Investigation in the Police Department charged with leaving his post without being relieved and absent without leave, and the Board of Investigation unanimously recommended his discharge from the service. Mr. Phelps, Secretary of the Commission, was present at the investigation, and the evidence presented was submitted, and upon the invitation of the Commission Mr. Devitt appeared to present his defense. He had been requested by the Secretary to bring with him any witnesses that he might desire to testify in his behalf. He stated that he had no witnesses present and had made no effort to secure any. The accused had practically no defense to offer, and on motion of Commissioner Hotz, seconded by Commissioner Waller, it was ordered that the Commission approve the recommendation of the investigating board and that the man be dismissed from the service; and the Secretary was instructed to certify the same to the Superintendent of Police.

The Secretary then presented the case of Mr. Thos. Coyle, a janitor at Stanton Avenue Police Station (5th Precinct), appointed after examination and serving on probation. His discharge from the service has been recommended by the Chief of Police for pulling

a patrol box and calling the patrol wagon without cause, on the night of July 17th, and for intoxication.

The following witnesses had been asked to appear and give testimony as to the facts:—

Lieut. Jas. H. Bonfield, Commanding 5th Precinct.

Desk Sergeant Fred Hellman, 5th Precinct.

Officer Lodge, 5th Precinct.

Officer John Burk, 5th Precinct.

Telephone Operator Frank Dubach, 5th Precinct.

Also officers who were on the patrol wagon that responded to the call on the night of July 17th.

Mr. Coyle appeared in person to testify in his own defense. He admitted drinking beer occasionally but claimed never to excess. He denied having pulled the police box as charged on the night of July 17th.

From the testimony of the witnesses present the Commission was of the unanimous opinion that the charges were sustained, and on motion of Commissioner Waller, seconded by Commissioner Hotz, it was ordered that his dismissal from the service, as asked for by the Superintendent of Police, be approved, and the Secretary was instructed to certify the finding of the Commission to the General Superintendent of Police.

The Secretary submitted an itemized list of the expenditures made by the Commission during the month of July as follows:—

| | | |
|---|------------|------------|
| Pay Roll, month of July..... | \$2,343 16 | |
| Cameron, Amberg & Co., Stationery..... | \$21 98 | } 105 12 |
| Blank books..... | 24 64 | |
| Printing..... | 58 50 | |
| Chicago Dispatch, Advertising..... | | 2 34 |
| Incidentals (E. J. Phelps)..... | | 32 00 |
| Cameron, Amberg & Co., Furniture (box for original records)..... | | 7 50 |
| Hattie A. Shinn, Reporting and transcribing testimony, investigation of the 8th District, Street Department.... | | 289 50 |
| | | <hr/> |
| | | \$2,779 62 |

The several items were carefully considered, audited, approved and ordered sent to the Comptroller for payment.

There being no further business the meeting then adjourned.

EDWARD J. PHELPS,

Secretary.

JOHN M. CLARK,

President.

August 20, 1896.

The Civil Service Commission of Chicago held a meeting in its office, No. 115, City Hall, Commissioner Hotz in the chair. Present: Commissioners Hotz and Waller. Absent: Commissioner Clark.

The Secretary presented the case of Ellwood P. Martin, No. 8823 Houston Avenue, at present on the eligible list for oilers. It appeared from the records of the Public Works Department that Mr. Martin had been twice discharged from the department for cause. Mr. Martin appeared before the Commission and admitted the truth of the records of the department referred to. By unanimous vote his name was ordered stricken from the eligible list.

The Secretary next presented the case of Daniel R. Crowley, on the list of eligibles for telephone operators. Mr. Crowley was charged with making a false statement in his application for entrance to the service. In his application blank he had sworn that he had resigned from the Fire Department. From the records of that department it appeared that he had been discharged for cause. Mr. Crowley appeared before the Commission in person, and admitted the truth of the record of the department, and could give no reason for the statement in his application. His name was therefore ordered stricken from the eligible list for telephone operators.

The Secretary next presented the case of Thos. P. Davitt, who had been certified by the Commission to the Department of Police as a patrolman. That department had lodged charges of being absent from duty without permission against Mr. Davitt, and all the evidence in his case had been heard by the investigating board of the Civil Service Commission in the Police Department. That board recommended that he be discharged from the service. Mr. Davitt appeared before the Commission in person to meet the charges preferred against him. From his own statement it appeared that, in response to a communication from the Commission urging him to bring witnesses in his own behalf, he had failed to take any action in this direction. He could give no satisfactory explanation of his being absent from duty, and by unanimous vote the Commission approved the finding of its police investigating board.

The Secretary next presented the case of Wm. B. Munson, who had been certified as a driver by the Commission to the Fire Department. Charges had been lodged against him by that department of being absent from duty without permission, and the trial board of the department recommended his discharge. The Secretary

reported that he had been unable to locate Mr. Munson's whereabouts, communication sent him to the address which he left with the Commission having been returned by the postal authorities. The Secretary reported further that he had been verbally notified by Acting Fire Marshal Musham that Mr. Munson had gone to Kansas City to live, and was at present a member of the Kansas City Fire Department. After having considered the evidence fully, the Commission approved the finding of the trial board of the Fire Department that Mr. Munson be discharged from the service.

A report was submitted to the Commission by Commissioner of Public Works Downey that Mr. Harry A. Hahn, who had been certified to the Public Works Department by the Commission as a rodman, had been suspended under charges made by the Alsip Brick Co. The charges were that in his capacity as rodman he had solicited money from the Alsip Brick Company in the matter of the inspection of some brick which the company was furnishing the city. A motion was made and unanimously carried, that the Commission investigate the charges fully.

Mr. Waller moved that the Chief Examiner be instructed to advertise an examination for medical inspectors in the Department of Health, to be held September 3rd, 1896. The motion was carried unanimously.

Commissioner Waller also moved that the Chief Examiner be instructed to advertise examinations as follows:—

On Friday, September 4th, for stationary firemen, coal passers, and linemen.

On Tuesday, September 8th, for drivers in the Police and Fire Departments.

On Thursday, September 10th, for fumigators, meat inspectors, and tenement inspectors in the Department of Health.

On Tuesday, September 15th, for civil engineers and rodmen.

On Tuesday, September 22nd, for stenographers.

On Thursday, October 1st, 1896, for a promotion examination of operators in the Vessel Dispatch Bureau to be clerks in the same bureau.

On Friday, October 2nd, 1896, for foremen of laborers in the Department of Street and Alley Cleaning and in the Water Pipe Extension Department.

The motion was unanimously carried.

There being no further business the meeting then adjourned.

EDWARD J. PHELPS,

Secretary.

CHRISTOPH HOTZ,

Acting President.

August 30, 1896.

The Civil Service Commission of Chicago held a meeting in its office, No. 115, City Hall, Commissioner Hotz in the chair. Present: Commissioners Hotz and Waller. Absent: Commissioner Clark.

The Secretary submitted an itemized list of the expenditures made by the Commission during the month of August, as follows:

| | |
|--|------------|
| Pay Roll..... | \$2,188 16 |
| Cameron, Amberg & Co., Stationery..... | 8 18 |
| Cameron, Amberg & Co., (Postal cards) postage..... | 11 30 |
| Cameron, Amberg & Co., Printing..... | 3 00 |
| Cameron, Amberg & Co., Blank books..... | 1 38 |
| Chicago Dispatch, Advertising..... | 10 20 |

INCIDENTALS:

| | |
|---|-------|
| Hattie A. Shinn, Stenographer at investigation, pay roll... | 90 50 |
| Richard Hubbard, Janitor services at Battery D, months June, July and August | 36 00 |
| Chicago Telephone Co., months of April, May and June... | 33 75 |
| E. J. Phelps, Expressing, car-fare, telegrams, witness fees and stamps | 10 20 |
| Waukesha Hygeia Mineral Co., Water for office..... | 3 75 |

\$2,396 42

The several items were carefully considered, audited, approved, and ordered sent to the Comptroller for payment.

The Commission had been notified by Commissioner of Public Works Downey that a vacancy existed in grade 5, Division G, Mechanical Engineers. The Secretary was instructed to cause notice to be posted in all the engine rooms and pumping stations in the service of the city inquiring whether there were enough applicants for promotion from the next lower grade to render a promotion examination practicable.

There being no further business the meeting then adjourned.

EDWARD J. PHELPS,
Secretary.

CHRISTOPH HOTZ,
Acting President.

September 2, 1896.

The Civil Service Commission of Chicago held a meeting in its office, No. 115, City Hall, Commissioner Hotz in the chair. Present: Commissioners Hotz and Waller. Absent: Commissioner Clark.

Commissioner Waller moved that grades 1 and 2, Division G, Mechanical Engineers, be grouped together and made the entering grade for that division, and be considered as one grade for the purpose of examination for original entrance or promotion. The motion was unanimously carried.

There being no further business the meeting then adjourned.

EDWARD J. PHELPS,
Secretary.

CHRISTOPH HOTZ,
Acting President.

September 11, 1896.

The Civil Service Commission of Chicago held a meeting in its office, No. 115, City Hall, Commissioner Hotz in the chair. Present: Commissioners Hotz and Waller. Absent: Commissioner Clark.

Commissioner Waller reported that at various times the Commission had investigated the charges referred to in meeting of August 20th, against Harry A. Hahn, certified by the Commission as rodman in the Department of Public Works, who had been suspended under charges made by the Alsip Brick Company, accusing him of the solicitation of money. Commissioner Waller further reported that Mr. Hahn, W. S. Alsip, of the Alsip Brick Company, Mr. J. Platt, an employe of said company, and Mr. John McNichols, mason inspector in the employ of the city, had all appeared before the Commission personally at various times, and that their evidence had been taken down by a stenographer. The evidence was produced, and the Commission voted unanimously that the charges against Mr. Hahn had not been sustained, and that there had been nothing in his conduct to warrant the preferment of charges. In the absence from Chicago of the Commissioner of Public Works, Mr. L. B. Jackson, City Engineer, appeared before the Commission, and was notified verbally of its finding, and was requested to restore Mr. Hahn to active service, with full pay for the time lost during suspension. The Secretary was instructed to notify the Commissioner of Public Works at once, in writing, of the finding and action of the Commission.

There being no further business the meeting then adjourned.

EDWARD J. PHELPS,
Secretary.

CHRISTOPH HOTZ,
Acting President.

September 18, 1896.

The Civil Service Commission of Chicago met in its office, No. 115, City Hall, Chicago, Friday, September 18th, 1896, at 11 A. M.

There were present Commissioners Clark, Waller and Hotz, the President in the chair.

The Commission having received information that one Milo E. Snowden had been through the City Hall endeavoring to collect subscriptions for political purposes, subpoenas were issued requiring his presence before the Commission at this time, and also for George H. Jenny, E. P. Haven, Michael Keck and Milton Jones as witnesses in the case. The parties were all present, and the witnesses were examined under oath as to the facts in the case.

The testimony was explicit, and established to the satisfaction of the Commission that there had been an intentional and flagrant violation of the law.

Mr. Snowden was given an opportunity to make a statement in his own defense if he desired to do so, and was informed by the President of the Commission that it was not expected that he should give evidence incriminating himself. He said that he would prefer not to make any statement at this time, and was excused from doing so by the Commission.

The evidence in the case was taken down by a court reporter, and a typewritten copy is on file in the office of the Commission.

On motion of Commissioner Hotz, seconded by Commissioner Waller, it was unanimously ordered that a copy of the evidence be sent to the District Attorney to be submitted to the Grand Jury for such action as it may see proper to take.

The Secretary reported that, as instructed by the Commission, he had made inquiry through advertisement in the newspapers and notices posted in the various engine rooms of the city service, as to the number of persons serving as mechanical engineers in grade 4 of the Official Service, who desired to enter an examination for promotion to fill a vacancy existing in grade 5, and that only two persons eligible to such promotion had applied. It being obviously impracticable to fill the said existing vacancy in the 5th grade by promotion examination of those in the next lower grade, the Secretary was instructed to advertise a promotion examination for entrance to grade 5, mechanical engineers, said examination to be

open to all engineers in the service of the city who have served six months or more in grades 1, 2, 3 or 4, Division G.

There being no further business the meeting then adjourned.

EDWARD J. PHELPS,

Secretary.

JOHN M. CLARK,

President.

September 22, 1896.

The Civil Service Commission of Chicago met in its office, No. 115, City Hall, on Tuesday, September 22nd, at 11 A. M.

There were present Commissioners Clark, Waller and Hotz, the President in the chair.

The Secretary presented the case of Mr. Bernard Straube, who after examination had been certified to the Department of Health as meat inspector, and who had been serving in that capacity on probation.

On August 21st, charges of improper official action were brought against Mr. Straube by the Commissioner of Health, and authority for his discharge from the service asked. Mr. Straube was furnished a copy of the charges and given an opportunity to appear at this time before the Commission in his own defense.

After being sworn, he was asked to make his own statement of the facts in the case. From the statement so made the Commissioners were unanimously convinced that the charges against him were fully sustained; and on motion of Commissioner Waller, seconded by Commissioner Hotz, it was ordered that the consent of the Commission to his discharge from the service be granted, and the Secretary was instructed to certify the same to the Commissioner of Health.

The Secretary and Chief Examiner reported that he had received information from the Library Board that the Public Library Building is now nearing completion, and the services of an engineer and two or more assistants will soon be required.

The salary of the chief engineer has been fixed at \$2,000, placing the position in the 7th grade. The duties will require not only a thorough knowledge of steam engineering but also of electrical engineering and appliances, as a large part of the machinery is electrical.

In view of the facts it was the opinion of the Commission that it was not practicable to fill the position by promotion, as a knowledge of electricity has not been made a part of any examination of candidates in Division G. Therefore, it was ordered that the Chief Examiner be instructed to advertise a special examination for the position of Chief Engineer of the Public Library, and to state in the advertisement that it is intended that the applicant passing with the highest general average shall receive the appointment as chief engineer, and those next on the list in their order will be offered positions as assistants if they desire to accept the same.

There being no further business the meeting then adjourned.

EDWARD J. PHELPS,
Secretary.

JOHN M. CLARK,
President.

September 30, 1896.

The Civil Service Commission of Chicago met in its office, room 115, City Hall, on Wednesday, September 30, 1896, at 3 P. M.

There were present Commissioners Clark, Waller and Hotz, the President in the chair.

The Secretary presented the case of John P. Haag, who after examination had been certified to the Police Department and was serving as patrolman on probation.

Charges of incapacity and inefficiency in the discharge of his duties had been preferred against him, and at a hearing before the Investigating Board for that department his discharge from the service was unanimously asked for.

Mr. Haag was notified to appear before the Commission at this time to make his defense, and instructed to bring any witnesses that he desired to corroborate his statements. He was present; also Chief Badenoch and Asst. Chief Ross, Lieutenant Rehm and Officer Turek. Mr. Haag was sworn and asked to make his statement of the facts in the case in his own way, which he did; after which Lieut. Rehm and Officer Turek, both of whom were on duty at the place where the trouble occurred, were examined by the Commission.

As a result of the investigation the Commissioners were unanimously of the opinion that the charges were sustained; the request

for his discharge from the service was approved. The Secretary was instructed to certify the same to the Superintendent of Police, and to notify the accused of the fact.

The following items of expenditure by the Commission for the month of September were submitted, audited, approved and ordered sent to the Comptroller for payment:

| | | | |
|--|-------|----|-------------------|
| Cameron, Amberg & Co.: | | | |
| Stationery | \$ 81 | 23 | |
| Printing new edition of the law and rules.. | 394 | 00 | |
| Blank books | 10 | 69 | |
| Postage | 10 | 00 | \$495 92 |
| Chicago Dispatch, Advertising examinations | | | 3 78 |
| Chas. Truax, Greene & Co., (Cook's tubing and tap.) | | | 1 32 |
| J. M. W. Jones Printing Co., (Letter heads.) | | | 18 00 |
| Richard Hubbard, (Janitor at Battery D, preparing room for examinations.) | | | 16 00 |
| E. J. Phelps: | | | |
| P. D. Tyrrell, (car and railroad fare) | \$ 1 | 39 | |
| L. E. Larson, (2 sets dies and holders) | 1 | 65 | |
| Chicago Reporting Co., (Mimeograph work) .. | 25 | 70 | |
| Stamps and car-fare | 30 | | 29 04 |
| Pay Roll for month of September, 1896. | | | 2,438 66 |
| | | | <u>\$3,002 72</u> |

There being no further business the meeting then adjourned.

EDWARD J. PHELPS,
Secretary.

JOHN M. CLARK,
President.

October 3, 1896.

The Civil Service Commission of Chicago met in its office, room 115, City Hall, on Saturday, October 3rd, at 11 A. M. There were present Commissioners Clark and Hotz, the President in the chair. Absent: Commissioner Waller.

The Secretary presented the case of James Foley who, after examination, had been certified to the Police Department and has been serving as a patrolman on probation.

Charges of "intoxication, disorderly conduct, and violation of various rules of the Department" had been preferred against him; at a hearing before the board appointed by the Commission to investigate such charges in the police service, he pleaded guilty, and a unanimous verdict was rendered that the charges were sustained, and authority was asked for his discharge from the service.

The accused was notified to be present at this meeting to be heard in his defense, and to bring any witnesses that he might desire.

Patrick Cannon, 5735 Halsted St., Lieutenant Burdick, Sergeant Mansfield and Officer Cole were present, and testified in the case.

From the statement made by the accused, and from evidence presented by the witnesses, it was the unanimous opinion of the Commission that the charges were sustained, and the recommendation that he be discharged from the service was approved.

The Secretary was instructed to certify the same to the Superintendent of Police, and to notify the accused in writing to that effect.

The Secretary then presented the case of Wm. B. Goforth who, after examination had been certified to the Police Department, and who had been serving on probation as patrolman.

Charges of intoxication had been preferred against him and, at a hearing before the Board of Investigation he had pleaded guilty. The unanimous verdict of the Board was that he should be discharged from the service. He had been notified to appear at this meeting and be heard in his defense, but failed to appear. The evidence submitted at the investigation was read by the Commission, and it unanimously concurred in the finding of the Investigating Board, and approved his discharge from the service, and the Secretary was instructed to certify the same to the Superintendent of Police, and to notify the accused of the same.

There being no further business the meeting was adjourned.

EDWARD J. PHELPS,
Secretary.

JOHN M. CLARK,
President.

October 5, 1896.

The Civil Service Commission of Chicago met in its office, room 115, City Hall, on Monday, October 5th, at 11 A. M. There were present Commissioners Clark, Waller and Hotz, the President in the chair.

The President called attention to the fact that the appropriation made for the use of the Commission is now practically exhausted. After careful consideration of the subject, the following communication was addressed to the City Council:

“October 5, 1896.

“TO HIS HONOR, THE MAYOR, AND THE CITY COUNCIL OF CHICAGO,
Chicago, Ill.,

“*Gentlemen* :—The Civil Service Commission of Chicago respectfully submits the following statement:

“In the last annual appropriation bill the sum of twenty-five thousand (\$25,000) dollars was allowed for the purposes of the Commission for the present fiscal year. This sum was much less than had been asked for by the Commission, and less than it believed to be absolutely necessary for the proper conduct of the work devolving upon it by law.

“It has endeavored, however, by the exercise of the strictest economy in every branch of its work to keep its expenditures within the sum appropriated.

“It should be understood that there are some items of expenditure that are not entirely within the control of the Commission; for instance, examinations are advertised as required by law, in response to which a large number of applicants present themselves. The Commission is obliged to examine all who make application, in conformity with the law and the rules; and the papers of all who are examined must be marked, in order that a result may be reached. These papers must be marked with the utmost accuracy and care, in order that no injustice be done to any applicant, and it should, in fairness to the candidates, be done without unreasonable delay, so that for their own guidance they may be early apprised of the result.

“This work costs money, and is, in fact, one of the chief items of expenditure by the Commission.

“The appropriation made for the use of the Commission is now practically exhausted, while there yet remain nearly three months of the year for which it was made.

“As the law remains in force, and appointments and promotions can only be made in accordance with its provisions, serious confusion and embarrassment in the several departments of the city government would necessarily result from a cessation of the work of the Commission, and hence an emergency exists which, it is believed, justifies action by your honorable body.

“There are now on the books of the Commission nearly four thousand (4,000) applicants awaiting examination for the various branches of the city service, and there are a large number of papers of examinations recently held, now in process of marking.

“The Commission estimates that to complete the work before it, in accordance with the law, during the remainder of the fiscal year, will require at least ten thousand (\$10,000) dollars, and it respectfully asks that that sum be appropriated for the purpose.

“The books and papers of the Commission, showing all items and details of its expenditures, will be gladly submitted to inspection of the Council, or of its committees at any time.

Respectfully submitted,

(Signed) JOHN M. CLARK,

(Signed) R. A. WALLER,

(Signed) CHRISTOPH HOTZ.

Civil Service Commissioners.”

The President referred to questions that had heretofore been under consideration by the Commission as to a proper interpretation of the law, and submitted letters written in relation thereto to the Corporation Counsel, with his replies to the same, as follows:

“September 22, 1896.

“HON. WM. G. BEALE,

Corporation Counsel, City of Chicago, Ill.

“*Dear Sir* :—Section 11, of the Act known as the Civil Service Act, approved March 20th, 1895, in specifying public officers exempt from the operation of the law, names among others, ‘heads of any principal department of the city.’ As there may arise some question as to the exact meaning and scope of this provision of the Act, the Civil Service Commission respectfully asks your official opinion in regard to it.

“The term ‘appointing officer’ occurs in several places in the Act, and the Commission has been of opinion that it was intended to mean an officer who, under the ordinances of the city, has the power of appointment and removal of subordinates, and it has assumed in a general way that only heads of principal departments possessed the power.

“It has therefore assumed, and its action so far as occasion has arisen has been on the assumption, that all subordinate officers in the employ of the city, however important their duties may be, are

in the Classified Service, unless made exempt by some other provision of Section 11.

“The Commission desires to know if it has been right in this assumption.

Respectfully submitted,

(Signed) JOHN M. CLARK,
President.”

“October 3rd, 1896.

“HON. JOHN M. CLARK,
President Civil Service Commission, City of Chicago.

“*Dear Sir:*—I beg to acknowledge receipt of your favor of September 22nd, requesting my opinion as to the meaning of the expression ‘heads of any principal department of the city’ in Section 11 of the Civil Service Act. I understand that you desire to know what ought legally to be regarded as a ‘principal department’ of the municipal government.

“In my opinion a principal department is one which, in the main, is subordinate only to the City Council and to the Mayor. Subordinate divisions of the municipal service, though they may be spoken of as departments, can hardly be regarded as principal departments within the meaning of the law. It would be more proper to call them ‘bureaus.’ For example, the city has two bureaus, commonly called the ‘Street Department’ and the ‘Water Department.’ These are really subdivisions of the Department of Public Works, and their heads are under the supervision and control of the Commissioner of Public Works. The so-called Street Department and Water Department cannot be considered as principal departments under the Civil Service Law. There are doubtless other cases of the same kind. The heads of these subordinate branches of the municipal service are not to be regarded as heads of principal departments and would not be exempt as such from classification in the Classified Civil Service. There is some absence of uniformity in the method by which these bureau chiefs are appointed. Some of them are appointed by the Mayor and confirmed by the Council, in which case they would be exempt from classification in the Classified Service because all officers so appointed and confirmed are expressly exempted by the Act. Other bureau chiefs are appointed by the heads of departments of

which they form a subdivision, and in such latter cases these chiefs would not be exempt from classification under the law, no matter how important their bureaus.

Very respectfully yours,

(Signed) WM. G. BEALE,
Corporation Counsel."

"September 29, 1896.

"HON. WM. G. BEALE,
Corporation Counsel, City of Chicago.

"*Dear Sir:*—An application has been made to the Civil Service Commission by the Chief Fire Marshal in regard to an officer in the Fire Department, who is now on the retired list by reason of accidents received in the line of his duty. It is now claimed that his health is completely restored, and permission is asked to restore him to his old position in the active force, a vacancy now existing.

"The question is, can this be done without violating the last clause in Section 3 of the Act.

"The real question is as to whether a pensioner in the Fire or Police Department is still technically in the service of the city, and that would probably depend upon the ordinances in force governing the same.

"If still in the service, he could, under the rules, be reassigned to duty, but he would first be required to pass examination before the Medical Board as to his physical condition.

"The Commission would be glad of an official opinion as to its power in the matter.

Respectfully submitted,

CIVIL SERVICE COMMISSION,

(Signed) JOHN M. CLARK,
President."

"October 3, 1896.

"HON. JOHN M. CLARK,
President Civil Service Commission, City of Chicago.

"*Dear Sir:*—In response to your letter of September 29th, and confirming what I have said verbally to the Commission, I beg

to advise you that, in my opinion, a fireman on the retired list is still to be legally regarded as a member of the Fire Department, and subject to restoration to the place from which he was retired if, upon examination, it is disclosed that he is able to perform his duties. In other words, I think that such a retired fireman need not take the civil service examination required of an original applicant for a place in the Fire Department.

Very respectfully yours,

(Signed) WM. G. BEALE,
Corporation Counsel."

In accordance with the opinion of the Corporation Counsel, it was ordered that Captain Thos. P. Barry, now on the retired list, be submitted to examination before the Medical Board as to his physical qualifications for reassignment to active service, and if found qualified, that he be certified in response to the requisition of the Chief Fire Marshal of August 8th.

There being no further business the meeting then adjourned.

EDWARD J. PHELPS,
Secretary.

JOHN M. CLARK,
President.

October 19, 1896.

The Civil Service Commission of Chicago met in its office, room 115, City Hall, on October 19th, at 11 A. M. There were present Commissioners Clark, Waller and Hotz, the President in the chair.

The minutes of all meetings held by the Commission, from June 15th to October 5th, both inclusive, were read and approved.

The President submitted the following communication from the Commissioner of Public Works:

"August 25, 1896.

"HON. JOHN M. CLARK,

President Civil Service Commission:

"*Dear Sir:* Last June the name of John McNulty was included in a list of mason inspectors who were discharged for permitting faulty work to be done upon the Northwest Land Tunnel. A

thorough investigation shows that an injustice was done Mr. McNulty, as he was, at the time the imperfect work was done, inspecting material at the mouth of the tunnel above ground. His name appeared on the pay roll as 'mason inspector' (although he was not performing the duties of a mason inspector, as above stated), and when it was decided to discharge all the mason inspectors who permitted the work to be done, he was, by mistake, included in the list.

'I am of the opinion that your Commission is willing to assist in rectifying the mistake, and I respectfully ask permission to reinstate Mr. McNulty. Yours very truly,

JOSEPH DOWNEY,
Commissioner."

The subject of this communication was very carefully considered, as, in passing upon this case the decision would govern a number of similar applications now pending before the Commission for action.

It is known that there are several thousand persons in Chicago who at some time have been in the employ of the city, and who have been discharged from the service for reasons that could not now be held as sufficient. These persons represent both political parties and all branches of the service.

The unanimous opinion of the Commissioners was that reinstatement, without examination, of persons who had formerly been connected with the service, but had for any cause been separated from it, would be contrary to the letter and spirit of the law and the rules, and would nullify them; and further, that such reinstatements would be a manifest injustice to applicants who had taken the examinations in good faith and whose names were on eligible lists awaiting appointments to vacancies as they might occur.

The following answer was agreed upon, and upon motion of Commissioner Waller, seconded by Commissioner Hotz, was ordered sent to the Commissioner of Public Works:

"October 19, 1896.

"HON. JOSEPH DOWNEY,

Commissioner of Public Works, City:

"Dear Sir: The Civil Service Commission of Chicago begs to acknowledge receipt of your communication of August 25th, 1896,

referring to the discharge, in June, 1896, by Commissioner Kent, your predecessor, of John McNulty, who at that time was serving as mason inspector in the Department of Public Works, and asking that he be reinstated in his position.

"It is claimed, and for the purpose of argument it may be admitted, that the action taken was based on wrong information, or that an error of judgment was made by the Commissioner in ordering the discharge of McNulty.

"The question for the Commission to decide is, whether under the law and the rules it has the power to authorize his reinstatement.

"The question has received most careful consideration by the Commissioners, and every effort made to reach a correct conclusion in regard to it.

"The law permits the removal, without cause, of all employes of the city, who have not obtained their positions under the rules and after examination, and it does not seem to contemplate that the Commission shall inquire as to the causes, the wisdom or the justice of such removals, or to take any action in regard to them, further than to recognize them when accomplished and enter the same upon its official records. When this has been done, the party removed is out of the service. For those who are not in the service, there is only one way provided for gaining entrance to it, and this is through examination in accordance with the law and the rules.

"Rule XIV provides a method of reinstatement in the Classified Service, but it applies only to those who had been appointed under the rules and after examination.

"In view of these provisions of the law and of the rules, the Commission is unanimously of the opinion, that, having no jurisdiction as to the removal of an employe who was not appointed under the rules and after examination, it has no power to authorize the reinstatement of any such person, except in accordance with the rules and after examination.

Yours very truly,

(Signed) JOHN M. CLARK,
President."

There being no other business, the meeting adjourned.

EDWARD J. PHELPS,
Secretary.

JOHN M. CLARK,
President.

November 2, 1896.

The Civil Service Commission met in its office, room 115, City Hall, November 2, 1896, at 11 A. M. There were present Commissioners Clark, Waller and Hotz, the President in the chair.

The minutes of the previous meeting were read and approved.

The Secretary presented the case of Nathan W. Kelly, 3145 Armour Ave., whose name stands on the list of eligibles for certification to the police service, and reported that the records of the Police Department show that Mr. Kelly had been discharged from that department in the past for good cause. Mr. Kelly appeared before the Commission, at its request, and it was explained to him that, under the rules, he could not be certified to the Police Department for employment, so long as the official records showed discharge for good cause from the public service. The motion was unanimously carried that his name be stricken from the Commission's list of eligibles, and the Secretary was instructed to see that this was done.

The Secretary also presented the case of Patrick F. O'Connor, 970 N. Robey St. It appeared that Mr. O'Connor was one of the first to be examined for entrance to the Police Department by the Commission; he had been certified for appointment, and on appearing to be sworn in it was discovered that he was below the minimum height required by the rules for entrance to that service. At its request, Mr. O'Connor appeared before the Commission and the matter was explained to him, and it was shown that to certify him would be a direct injustice to a large number of other applicants who had been rejected for this same cause. The motion was unanimously carried that his name be stricken from the list of eligibles, and this the Secretary was instructed to do.

The case of Chas. O. Lipe, 6316 Grace Ave., was presented. Mr. Lipe passed the examination for entrance to the Police Department in October, 1895, and was placed upon the eligible list. Over a year elapsed before his name was reached for appointment; and in October, 1896, he, and 49 other eligibles were called before the Medical Board again, in order that before their certification to the Police Department it might be ascertained whether they had contracted any diseases between the date of examination and the date of certification that would disqualify them for the service. The Medical Board of the Commission having reported unanimously that Mr. Lipe's physical condition was not such as to justify his certification for employment, the Secretary was instructed to strike his name from the list of eligibles.

The case was presented of Henry B. Rance, 99 W. Adams Street. The case of Mr. Rance was exactly similar to that previously recited of Chas. O. Lipe, and the Commissioners unanimously voted that his name should be stricken from the list of eligibles, and instructed the Secretary to that effect.

The case was then presented of Jas. L. Watters, previously certified by the Commission to the Fire Department as assistant engineer. The Fire Marshal recommended that Mr. Watters be discharged from the public service for absenting himself from duty without permission, and asks the approval of the Commission. The Secretary reported that he, in accordance with instructions from the Commission, had summoned Mr. Watters to appear before it, but that the latter had failed to answer the summons. The motion was unanimously carried that the recommendation of the Fire Marshal be approved. The Secretary was instructed to certify the same to the Fire Marshal, and to inform Mr. Watters of the action taken.

The cases were presented of Abraham Goldberg and Nicholas J. Walsh. The Secretary reported that both of these men had been certified from the Commission's list of eligibles to the Department of Police as patrolmen, but that both had declined to serve, and had written letters to that effect. Inasmuch as no reasons were given satisfactory to the Commission, by either of the gentlemen, as to why they declined to accept the appointments tendered, the Secretary was instructed to strike their names from the eligible list for patrolmen.

The following itemized list of expenditures made by the Commission during the month of October, was submitted by the Secretary. After due consideration, the items were audited, approved, and ordered sent to the Comptroller for payment:

EXPENSE ACCOUNT FOR MONTH OF OCTOBER.

| | | |
|--|---------|----|
| Pay Roll for month of October, 1896..... | \$2,015 | 50 |
| Amberg File Cabinet Co..... | 45 | 50 |
| Chicago Dispatch..... | 10 | 44 |
| Cameron, Amberg & Co..... | 36 | 78 |
| White Rock Mineral Co..... | 3 | 75 |
| Postage, 500 2c. stamps..... | \$ 10 | 00 |
| 5,000 envelopes 2c..... | 109 | 60 |
| E. J. Phelps, Postage..... | 20 | 00 |
| Sundry..... | 7 | 71 |
| Total | \$2,259 | 28 |

There being no further business the meeting then adjourned.

EDWARD J. PHELPS,
Secretary.

JOHN M. CLARK,
President

December 2, 1896.

The Civil Service Commission of Chicago met in its room, 115 City Hall, on Tuesday, December 2nd, at 11:30 A. M.

There were present Commissioners Clark, Waller and Hotz, the President in the chair.

The minutes of the previous meeting were read and approved.

The following itemized list of expenditures made by the Commission during the month of November was submitted, carefully examined, audited, and ordered sent to the Comptroller for payment:

EXPENSE ACCOUNT FOR THE MONTH OF NOVEMBER, 1896.

| | | | |
|--|---------|----|----------|
| Cameron, Amberg & Co.: | | | |
| Stationery..... | \$43 | 51 | |
| Printing..... | 40 | 75 | |
| Blank books..... | 28 | 50 | \$112 76 |
| Marshall Field & Co., Toweling, etc..... | | | 15 92 |
| Chas. Truax, Greene & Co., Corks, bottles and tapes..... | | | 9 60 |
| Rockwell & Rupel Co., (36 File cabinets at \$2.00)..... | | | 72 00 |
| Hattie A. Shinn, (representation of cases to Mr. Downey by Mr. Mills)..... | | | 5 00 |
| C. C. Price, (1 day service as examiner Electrical Department)..... | | | 5 00 |
| J. M. W. Jones Printing Co., (Letter heads)..... | | | 22 00 |
| The Inter Ocean, (Advertising, Aug. 30, 1895)..... | | | 2 70 |
| Wyckoff, Seamans & Benedict, (Supplies)..... | | | 1 25 |
| Salaries and pay roll, month of November, 1896..... | | | 2,304 66 |
| E. J. Phelps, Incidentals..... | | | 6 35 |
| Total..... | \$2,557 | 24 | |

The Secretary brought up the question of the insufficiency of the clerical force of the office, a subject which has frequently been before the Commission. Owing to the limited appropriation made for the use of the Commission, economy has been necessary in every part of its work; as a matter of fact, economy in some departments has been carried so far as to cripple and seriously embarrass the work.

The Secretary called attention to the fact that, in accordance with the Act, it will be necessary to prepare the annual report of the Commission so that it may be submitted to the Mayor for transmission to the Council on or before the 15th of next month; and that he has not sufficient help in the office to enable him to do this within the time specified.

The Secretary reported that Mr. Sweeney who was employed as a messenger at \$35.00 per month, has been doing clerical work during the whole of the past year, and that he is a valuable man. After thoroughly considering it, it was moved by Commissioner Waller, seconded by Commissioner Hotz that:

“First. Mr. Sweeney be advanced to a clerkship with pay at the rate of \$800.00 per year.

“Second. That the Secretary call from the eligible list a messenger to fill the place vacated by the advancement of Mr. Sweeney, who shall be employed with a salary at the rate of \$35.00 per month.

“Third. That he call from the eligible list one additional clerk to act as general assistant in the office with a salary at the rate of \$800.00 per year.”

Carried by a unanimous vote.

The President submitted a communication from the Medical Board dated November 27th, and signed by Doctor Hawley, Secretary of the Board, in reference to the examination now being held of candidates for entrance to the police service. The communication stated that it was the opinion of the Board, based upon the experience gained at these examinations, that the published schedule of requirements for admission to the service, was, in some respects, unnecessarily stringent, especially so in the matter of the chest measurement. That this was particularly noticeable in very tall men. This subject has previously been considered by the Commission, and the minutes of the meeting held December 24, 1895, show that the opinion of various medical societies was asked in relation thereto. In the absence of a reply from either of the societies addressed, the Medical Board of the Commission was asked to consider the subject; and the communication from its Secretary is in response to that request.

The following is a copy of the communication from the Medical Board:

“CHICAGO, November 27, 1896.

“CHICAGO CIVIL SERVICE COMMISSION,
115 City Hall, City.

“Gentlemen:—The Medical Examining Board of your Commission has asked me to respectfully request the privilege of the following modifications of the schedules of chest circumference in relation to height heretofore adopted for examination of police candidates, viz.:

“First. All candidates whose heights equal five feet nine inches to six feet shall be accepted, if their chest measurement (quiescent) is within one inch of schedule measurement, their chest expansion being three inches or more, and other causes not found for rejection.

"Second. All candidates six feet or over shall be accepted if chest measurement (quiescent) is within one and one half inches of schedule requirement, their chest expansion being three inches or more, and other causes for rejection not being found.

"The Medical Board is confident that said modifications will prove beneficial, and bases this belief upon the results of recent police examinations.

"The Medical Board has just finished the examinations of about 850 candidates for the police service, and finds that the necessity of adhering strictly to this schedule has caused the rejection of at least 25 men whose chest measurements (quiescent) range from a fraction of an inch to an inch of the schedule requirements, but who are otherwise sound. Among this number are a good many men who are over six feet in height. We find that the strict adherence to this schedule makes it especially difficult to secure tall men, and those are the kind of officers the Police Department is anxious to enlist.

"From a medical standpoint, we are confident that this modification will increase rather than detract from the qualifications of the men selected. It will secure many more tall men, and owing to the required three inch chest expansion, it will cause the selection of men of better endurance and general health.

"We would suggest that all those candidates for police service heretofore rejected for no other cause than failure to conform to chest measurement requirements, who are within two inches of the standard, be called for re-examination at an early date.

Yours respectfully,

(Signed) JOSEPH R. HAWLEY,
Secretary."

After thorough discussion of the subject of this communication, it was, on motion of Commissioner Hotz, seconded by Commissioner Waller, ordered that the Medical Board be instructed to make the modification suggested in regard to all candidates now under examination, and that at the close of the examination it report to the Commission its judgment on the practical results of such modification, in order that a change in this rule may be made if found desirable.

There being no further business the meeting then adjourned.

EDWARD J. PHELPS,
Secretary.

JOHN M. CLARK,
President.

December 4, 1896.

The Civil Service Commission met in its office, No. 115, City Hall, on Friday, December 4th, at 11 A. M. There were present Commissioners Clark, Waller and Hotz, the President in the chair.

The minutes of the previous meeting were read and approved.

The Secretary stated that charges of incompetency had been filed against Charles L. Clarke and Francis P. Bishop, who are serving on probation as paving inspectors; that they have been suspended and their discharge from the service recommended by the Commissioner of Public Works; that they have been invited to appear before the Commission to make statements in their own defense, and informed that they could bring any witnesses that they desired to testify in their case; that Messrs. Clarke and Bishop were here present and desired to be heard; that Mr. MacDonald, Superintendent of the Bureau of Streets, by whom the charges were filed, had been asked to be present and was also here with a number of witnesses conversant with the facts.

The Commission listened to the sworn testimony of Messrs. Clarke and Bishop; and also that of Messrs. Laramie, J. J. Jones, Geo. W. Townsend and James Lowery, all of whom are paving inspectors in the employ of the City. At the conclusion of the testimony, Messrs. Clarke and Bishop stated that they desired to present the testimony of two persons whose presence they had been unable to secure. The names of the two persons were taken by the Secretary and he was instructed to summon them to appear on Monday, December 7th, at 11 A. M. The further consideration of the case was postponed until that date.

The Secretary also presented the case of Mr. Robert H. Parker, who stands on the eligible list for district foremen, and who has recently been accused of disgraceful conduct, in connection with service on the grand jury, and subjected to a severe fine by Judge Hutchinson for contempt of court in connection with the same. The Secretary was instructed to summon Mr. Parker to appear before the Commission to show cause why his name should not be stricken from the eligible list, in accordance with Section 5, of Rule III.

Mr. Parker having failed to appear as requested, or to make any answer to the summons of the Commission, on motion of Commissioner Hotz, seconded by Commissioner Waller, it was ordered

that his name be stricken from the list of eligibles, and the Secretary was instructed to see that this was done and to notify Mr. Parker of the action taken.

There being no further business the meeting then adjourned.

EDWARD J. PHELPS,

Secretary.

JOHN M. CLARK,

President.

December 7, 1896.

The Civil Service Commission of Chicago, met in its office, room 115, City Hall, on Monday, December 7th, at 11 A. M. There were present Commissioners Clark, Waller and Hotz, the President in the chair.

The minutes of the last meeting were read and approved.

The Secretary stated that the hearing of charges against paving inspectors Clarke and Bishop, which was begun on December 4th and continued until this date, was now ready, the witnesses being present.

The case was taken up and Mr. Geo. F. Culmer and Mr. B. F. Bowman, who had been summoned on behalf of the defense, were duly sworn and gave their testimony. The matter was taken under advisement by the Commission.

The Secretary reported that (as instructed by the Commissioners at a previous meeting) Mr. Clyde W. B. Harkness, who is next on the eligible list for messengers, had been employed at a salary of \$35.00 per month; and that Mr. Harkness would report for duty to-morrow, December 8th.

There being no further business the meeting then adjourned.

EDWARD J. PHELPS,

Secretary.

JOHN M. CLARK,

President.

December 9, 1896.

The Civil Service Commission met in its office, room 115, City Hall, on Wednesday, December 9th, 1896, at 11 A. M. There were present: Commissioners Clark, Waller and Hotz, the President in the chair.

Minutes of the last meeting were read and approved.

The Secretary stated that Mr. W. G. Harte, assistant engineer, who had been appointed after examination, and who had been serving on probation, and against whom charges of incompetency have been made, and his discharge from the service asked for, had been informed that he would be given an opportunity to appear before the Commission at this time, and that he was present with witnesses whose testimony he desired in his defense.

Mr. G. L. Clausen, Superintendent of Sewers, by whom the charges had been made, had been invited and was also present with a number of witnesses who were supposed to be conversant with the facts. The testimony of the following witnesses was taken, notes of which in full were made by the stenographer and may be found on file:

Witnesses for prosecution.

G. L. Clausen,
Henry Roberts,
Wm. Howard,
Thos. Henry,
Thos. Conrad,
Samuel White,
Henry J. McNichols,
Thomas McNichols.

Witnesses for defense.

Wm. G. Harte,
J. H. Guest,
Chas. H. Taintor,
Alexander Penney,
Edgar S. Hart,
S. D. Gookins,
Wm. P. Smith,
J. S. Peebles.

The Commissioners having duly considered the evidence in the case of paving inspectors Charles L. Clarke and Francis P. Bishop, which was heard at meetings of December 4th and December 7th, are prepared now to make entry of their decision upon the records.

On December 8th, the following letter was received, bearing upon the case:

“CHICAGO, Dec. 8, 1896.

“E. J. PHELPS, Esq.,

Secretary, Civil Service Commission,

“*Dear Sir:*—Having been a spectator at the trial of Messrs. Bishop and Clarke held before your honorable body, and having

decided that it has been a fair and impartial trial, I desire to withdraw my charges against Mr. Bishop.

“Thanking you for your courteous treatment, I remain,

Yours truly,

(Signed) R. J. MACDONALD,
Superintendent of Streets.

“Approved December 10th, 1896,

(Signed) JOSEPH. DOWNEY,
Commissioner of Public Works.”

In view of the above letter, the case as against Mr. Bishop was dropped.

The Commission was unanimously of the opinion that the charges against Inspector Clarke were sustained, and the recommendation of the Commissioner of Public Works that he be discharged from the service was concurred in.

There being no further business, the meeting then adjourned.

EDWARD J. PHELPS,
Secretary.

JOHN M. CLARK,
President.

December 16, 1896.

The Civil Service Commission of Chicago met in its office, No. 115, City Hall, on Wednesday, December 16th, at 11 A. M.

Present: Commissioners Clark and Hotz; absent, Commissioner Waller.

The Secretary stated that the hearing in the case of Ward Inspector Rose had been set for this morning, and that the inspector and a large number of witnesses representing both sides of the case were present.

The Commission decided to proceed with the hearing at once.

Mr. Rose, who had passed examination, was duly appointed ward inspector on May 28th, 1896. Charges of incompetency have been lodged against him by John C. W. Rhode, Superintendent, Bureau of Street and Alley Cleaning, and his dismissal

from the service recommended by the Commissioner of Public Works.

Mr. Rhode was invited to be present at the hearing and to bring such witnesses as he might desire in support of the charges.

The following witnesses, after being duly sworn, were examined by the Commissioners, full notes of the same having been taken by the stenographer, which may be found on file.

Witnesses for prosecution.

John C. W. Rhode,
Hugh Ritchie,
Amanda Johnson,
J. E. Henry.

Witnesses for defense.

David E. Rose,
Mrs. Imogene Paul,
Miss Harriet A. Shinn,
Dr. Marcus B. Hatfield.

A number of official record books, private letters, and other documentary evidence were submitted.

After listening to all the evidence the Commissioners were of the opinion that the charges were not sustained, and the Secretary was instructed to certify the same to the appointing officer.

The Commissioners also entered their decision in the case of W. G. Harte, engineer, which was heard at the meeting of December 9th. The unanimous opinion of the Commissioners was that the charges were not sustained, and the Secretary was instructed to certify the same to the appointing officer.

The Secretary presented the case of Wm. M. Dolan, a member of the Fire Department, appointed after examination, against whom charges of repeated intoxication have been filed, and whose discharge from the service is recommended by the Chief.

Mr. Dolan was summoned to appear before the Commission on Tuesday, December 15th, at 11 A. M. to be heard in his own defense. Having failed to answer the summons or to send any explanation, on motion of Commissioner Hotz, it was ordered by unanimous vote that the recommendation of the Chief be concurred in. The Secretary was instructed to certify the same to the appointing officer.

There being no further business, the meeting then adjourned.

EDWARD J. PHELPS,

Secretary.

JOHN M. CLARK.

President.

December 23, 1896.

The Civil Service Commission of Chicago met in its office, room 115, City Hall, on Wednesday, December 23rd, at 11 A. M. There were present Commissioners Clark, Waller and Hotz, the President in the chair.

As a new edition of the rules of the Commission is about to be printed in connection with the annual report, it was suggested by the President that if any amendments are desired they should be considered at this meeting.

The Commission has been informed that it has been the practice for years in the Fire Department to divide the private members of the force, that is, pipemen, truckmen and drivers, into four classes.

Entry is made in what is known as the fourth class, and after one year's satisfactory service the man is moved forward into the third class; then after another year to the second, and finally after his third year of service into the first class, after serving one year in which he was considered eligible for promotion.

The system having worked satisfactorily in the past, it has been suggested that the rules of the Commission be so changed as to conform substantially to that practice. After due consideration it was moved by Commissioner Hotz, seconded by Commissioner Waller as follows:

"First. That grades 1 and 2, in Division F (Fire Service) be grouped together, and that for the purpose of examinations for original entrance or for promotion, they shall be regarded as one grade.

"Second. That pipemen and truckmen shall be eligible to enter an examination for promotion to the rank of lieutenant after four years of service in any of the classes or subdivisions of the first and second grades as herein grouped.

"Third. That Section 5, Rule VIII, be amended by striking out the words 'six months' in the third line, and by substituting the words 'one year' in place thereof, and by adding to the end of the section the following words:

" 'And no person shall be examined for promotion to the rank of lieutenant in Division F (Fire Department) until he shall have served at least four years as a member of the department; and the year of such service immediately preceding the examination shall have been as a pipeman or truckman.' "

Carried by a unanimous vote.

The President called the attention of the Commission to its action at the meeting of December 2nd, in authorizing its Medical Board to make experimentally a slight modification in the schedule of chest measurements of applicants for entrance to the police service.

The following report has been received from the Medical Board in relation to the same:

“CHICAGO, December 23, 1896.

“CIVIL SERVICE COMMISSION,
115 City Hall, City.

“*Gentlemen:*—Pursuant to your communication allowing your Medical Board to re-examine all those candidates in the last police examination who have been rejected for no other cause than a chest deficient in the schedule by 2 inches and who were over 5 ft. 9 in. in height, I wish to report that 65 candidates were notified to appear for re-examination November 21st. Of this number, 32 were passed under the modified schedule. It was the unanimous opinion of your Medical Board that the physical condition of these 32 men was fully as good as would be that of a corresponding number whose chests were up to the unmodified schedule, and other physical conditions equal. For this reason it was unanimously voted to request your honorable body to make the modifications permanent, the details of which I have already reported.

Respectfully submitted,

(Signed) JOSEPH R. HAWLEY,
Secretary.”

In view of the recommendations of the Medical Board, it was moved by Commissioner Waller, seconded by Commissioner Hotz, that Rules XI and XII be changed by adding the following:

“NOTE:—A modification of the chest measurements required in this schedule may be allowed as follows:

“To an applicant whose height is between 5 ft. 9 in. and 6 ft., a reduction of 1 inch or any fraction thereof.

“To an applicant whose height is 6 ft. or over, 1½ in. or any fraction thereof; providing that in each case the applicant shall have a chest expansion of 3 in. or more.”

Carried by unanimous vote.

It was moved by Commissioner Hotz, seconded by Commissioner Waller, that Section 2 of Rule XIII be amended by striking out the first word "temporary" at the beginning of the section, and the clause "but no such consent shall be given for a longer period than 30 days" at the end of the section.

Carried by unanimous vote.

It was moved by Commissioner Hotz, seconded by Commissioner Waller, that Rule I, Section 4, be amended by adding after the word "positions" in the paragraph relating to Division H, (Bridge Service) and Division J (Janitor and Elevator Service) and Division K (Library Service) the words "of a permanent character."

Carried by unanimous vote.

The Secretary called attention to the fact that at the meeting of September 2nd, at which only Commissioners Waller and Hotz were present, action was taken grouping the 1st and 2nd grades, Division G, Mechanical Engineers. The rules require, Rule I, Section 5, that such action shall be taken only by a vote of all the Commissioners. Commissioner Clark, on his return to the city, gave consent to the action of the other two Commissioners; but in order that the record may be entirely in accordance with the rules, it was moved by Commissioner Waller, and seconded by Commissioner Hotz, that the action taken by the Commission at its meeting of Sept. 2nd, be affirmed, and that grades 1 and 2, Division G, be grouped together and for all purposes of original entrance, promotions, or transfer be considered as one grade.

Carried by unanimous vote.

The Secretary reported that, as instructed by the Commission he had secured bids for printing the books and blanks of the Commission, and also for furnishing sundry merchandise. Seventeen firms were asked to bid. Three complete bids for furnishing the books and blanks were received as follows:

| | |
|--|--------------|
| Cameron, Amberg & Co..... | \$432 25 |
| A. R. Barnes & Co..... | 473 25 |
| Bentley, Murray & Co..... | \$394 00 |
| Plus (being the cost of postal cards included in specifications but not figured in the bid)... | 95 00 489 00 |

Cameron, Amberg & Co. being the lowest bidder, the contract for furnishing the books and stationery was awarded to that firm.

The Secretary further reported that but one complete bid for furnishing the merchandise had been submitted, namely, that of Cameron, Amberg & Co., \$286.86.

The contract for furnishing the merchandise was therefore awarded to the said firm.

Incomplete bids for furnishing the books and blanks were submitted by:

Thayer & Jackson Stationery Co.
Geo. E. Marshall & Co.
Geo. E. Cole & Co.
J. M. W. Jones Printing Co.

Incomplete bids for furnishing the merchandise were submitted by:

A. R. Barnes & Co.
Shea, Smith & Co.
Geo. E. Cole & Co.
J. M. W. Jones Printing Co.
Thayer & Jackson Stationery Co.

It was moved by Commissioner Hotz, seconded by Commissioner Waller, that grades 1 and 2 in Division J (Janitor and Elevator Service) be grouped together and for all purposes of examination for original entrance or for promotion, be considered as one grade. Carried by unanimous vote.

It was moved by Commissioner Hotz, seconded by Commissioner Waller, that all the changes made in the rules at this meeting be printed in the new edition of the rules accompanying the annual report; that they go into effect on February 1st, and that the Secretary have advertisement of the same made as the law requires.

There being no further business, the Commission then adjourned.

EDWARD J. PHELPS,
Secretary.

JOHN M. CLARK,
President.

December 31, 1896.

The Civil Service Commission of Chicago met in its office, room 115, City Hall, December 31st, 1896, at 11 A. M. There were present Commissioners Clark, Waller and Hotz, the President in the chair.

The minutes of the meetings of December 9th, 16th and 23rd were read and approved. An itemized account of the expenditures made by the Commission during the month of December was submitted, and after due examination was approved and ordered sent to the Comptroller for payment.

| | | |
|---|----------|------------------|
| Pay Roll for December..... | | \$2,122 28 |
| E. J. Phelps: | | |
| 10,000 2c stamped envelopes..... | \$219 20 | |
| 2,650 2c stamps..... | 53 00 | |
| 225 2c stamps..... | 4 50 | |
| 100 special 10c stamps..... | 10 00 | |
| Incidentals..... | 12 28 | 298 98 |
| E. J. Phelps, Incidentals..... | | 11 05 |
| Cameron, Amberg & Co.: | | |
| Printing, blanks, books, postage, etc. (as per contract)..... | | 432 25 |
| Stationery and office supplies (as per contract). Stationery, postage and office supplies..... | | 286 86 80 95 |
| Rockwell and Rupel Co., Cabinet document file..... | | 104 00 |
| Chicago Telephone Co., Rent of 'phone July 1st to Jan. 1st, '97... | | 67 50 |
| E. J. Phelps: | | |
| C. H. Slack, candles..... | 0 48 | |
| Pomeroy, Son & Co., cabinet..... | 7 00 | |
| Cameron, Amberg & Co., stationery and office supplies..... | 21 89 | 29 37 |
| | | <hr/> \$3,433 24 |

The Secretary reported that the result of the bids which he had been instructed to secure for printing and binding the annual report of the Commission was as follows:

| | |
|-----------------------------|------------|
| Rand, McNally & Co..... | \$2,072 50 |
| Cameron, Amberg & Co..... | 2,000 00 |
| W. B. Conkey & Co..... | 1,688 00 |
| A. R. Barnes & Co..... | 1,600 00 |
| S. D. Childs & Co..... | 1,586 50 |
| J. M. W. Jones Ptg. Co..... | 1,585 00 |
| P. F. Pettibone & Co..... | 1,260 00 |

It was moved by Commissioner Waller, seconded by Commissioner Hotz, that the contract be awarded to the lowest bidder, P. F. Pettibone & Co. The motion was carried.

The Secretary reported that the case of Wm. Leishman was now ready for consideration. Mr. Leishman passed the examination for mechanical engineers, was certified, and was serving on probation as assistant engineer at the Isolation Hospital. He had been suspended by the head of the department and his dismissal asked for on the ground of incompetency, and that he had been found sleeping while on duty and while his machinery was in motion.

He had been invited to be here at this time with such witnesses as he might care to bring to be heard in his own defense.

The Secretary stated that Mr. Leishman was now in attendance and that Mr. Carr, Secretary of the Health Department, by whom the charges were filed, was also present, having been invited by the Commission.

Mr. Leishman, after being duly sworn, was asked to state in his own way the facts in regard to the case and he did so. In this statement, he admitted that he had been asleep on two occasions. He stated that he had obtained some medicine from a doctor to keep him awake.

The following witnesses also testified:

John R. Robinson, engineer in charge of the Hospital.

Edward Tyne, fireman at the Hospital.

John Fraher, watchman at the Hospital.

The testimony went to show that Mr. Leishman had fallen asleep on more than one occasion; that he was a competent steam engineer; that a dynamo had been injured while in his charge, but as he was not examined on electrical machinery, he could not be held accountable for that.

The decision of the Commission was that the charges were sustained, and the recommendation of the Commissioner of Health was concurred in.

The Secretary was instructed to certify the same to the appointing officer, and to notify Mr. Leishman of the same.

The President reported the following correspondence with the Corporation Counsel:

“CHICAGO, December 28, 1896.

“HON. WM. G. BEALE,

Corporation Counsel, City of Chicago.

“*Dear Sir*:—The Civil Service Commission has frequent occasion to decide as to just what positions in the service of the City are excepted from the Classified Service, by virtue of Section 11 of the Act.

“As this is purely a question of law, and the decision in some cases involves important interests, the Commission respectfully asks your official opinion for its guidance.

“It would be very glad if this opinion could be had in time to be included in its annual report to the Mayor, soon to be made.

Very respectfully,

(Signed) JOHN M. CLARK,

President.”

To which the following reply was made:

“December 31, 1896.

“HON. JOHN M. CLARK,

President Civil Service Commission, City of Chicago.

“*Dear Sir:*—In accordance with your request I have had a careful examination made to ascertain what offices and places of employment under the municipal government of this city come within the exceptions of Section 11 of the Civil Service Law, and I believe that the list which I enclose covers all existing offices and places of employment which are excepted from the Classified Service *by virtue of said section.*

“In this connection reference may properly be made to the places of employment under the Commission. Section 11 is silent respecting them, but upon careful consideration of the purpose and scope of the law as a whole it is my opinion that the chief examiner and other examiners are not to be regarded as in the Classified Service of the city and as eligible for appointment only through competitive examination, but that the ordinary employees of the Commission should be so regarded.

Very respectfully yours,

(Signed) WM. G. BEALE,
Corporation Counsel.”

LIST OF CITY OFFICERS OR EMPLOYES EXCEPTED
FROM CLASSIFIED SERVICE UNDER SECTION
11 OF THE CIVIL SERVICE ACT

I.

ELECTED BY THE PEOPLE.

Mayor.

Members of the City Council.

City Clerk.

City Attorney.

City Treasurer.

II.

ELECTED BY THE CITY COUNCIL.

Sergeant-at-Arms of the Council.

III.

APPOINTED BY THE MAYOR SUBJECT TO CONFIRMATION BY THE
CITY COUNCIL.

Comptroller.
City Collector.
Corporation Counsel.
Prosecuting Attorney.
Commissioner of Public Works.
Deputy Commissioner of Public Works.
Inspector of Steam Boilers.
Inspector of Fish.
Inspector of Gas Meters.
Inspector of Oils.
Inspector of Weights and Measures.
Superintendent of Markets.
Superintendent of Street and Alley Cleaning Bureau.
Harbor Master.
Assistant Harbor Master.
Vessel Dispatcher.
Assistant Vessel Dispatcher.
Bridge Tenders.
General Superintendent of Police.
Police Justices.
Police Court Clerks.
Police Court Bailiffs.
Poundkeepers.
Commissioner of Health.
City Physician.
Commissioner of Buildings.
Fire Marshal.
Library Board.
Inspectors of House of Correction.
Board of Examining Engineers.

IV.

SPECIFICALLY EXCEPTED UNDER SECTION 11 OF THE ACT.

Members of Board of Education.

Judges and Clerks of Election.

Superintendent and Teachers of Schools.

One Private Secretary to Mayor.

Members of Law Department whose duties require knowledge of law.

V.

EXCEPTED BY OTHER SECTIONS OF THE CIVIL SERVICE ACT.

The Chief Examiner and assistants and the medical examiners of the Civil Service Commission.

There being no further business the Commission adjourned.

EDWARD J. PHELPS,
Secretary.

JOHN M. CLARK,
President.

SPECIMENS
OF
EXAMINATION QUESTIONS.

APPENDIX P.

SPECIMENS OF EXAMINATION QUESTIONS.

For general information and as a guide to applicants the following samples have been taken at random from papers that have been used by the Commission in both written and oral examinations. Lack of space has prevented the insertion of the questions for all examinations that have been held.

The questions for any examinations which do not appear in this book may be found in the Reference Room of the Public Library, where they have been placed on file for the benefit of the public.

MEDICAL SERVICE.

QUESTIONS FOR MEDICAL INSPECTORS.

(ORIGINAL ENTRANCE.)

Written Examination No. 105. Held Sept. 3, 1896.

1. Give *a.* indications for use of anti-toxin,
b. its dosage,
c. method of administration, and
d. the unfavorable results which may follow its use, and how they can best be avoided.
2. Give *a.* indications for vaccination,
b. how you would conduct the operation,
c. all the unfavorable results which may follow its administration, and how they can best be avoided.
3. Give etiology and symptomatology of
a. yellow fever,
b. cholera infantum,
c. malarial fever,
d. relapsing fever.

4. Describe the pathogenic microbes which may be found in Chicago's water supply.
5. Give the etiology and diagnosis of pneumonia.
6. Give the symptoms of epidemic cerebro-spinal meningitis.
7. If a man were found dead from variola in one of Chicago's "sweat shops," what would you consider the full duty of the Health Department in such a case?
8. Give etiology, morbid anatomy and types of variola.
9. Give the differential diagnosis and methods of transmission of scarlet fever.
10. Name the epidemic diseases which might be confounded with enteric fever.
11. Give an account of your medical education, as follows:
 - a. diplomas and their dates,
 - b. hospital experience and dates,
 - c. other qualifications, such as foreign study, positions held and post-graduate work. Give dates.

QUESTIONS FOR MILK INSPECTORS.

(ORIGINAL ENTRANCE.)

Written Examination No. 24. Held Nov. 7, 1895.

FIRST SUBJECT—ORTHOGRAPHY.

- | | | |
|----------------|------------------|----------------|
| 1. Physician. | 8. Medicine. | 15. Purify. |
| 2. Fumigate. | 9. Tenement. | 16. Sediment. |
| 3. Disinfect. | 10. Plumber. | 17. Analyze. |
| 4. Contagious. | 11. Inspector. | 18. Sample. |
| 5. Infectious. | 12. Vigilant. | 19. Pollution. |
| 6. Placard. | 13. Secretary. | 20. Rejection. |
| 7. Patient. | 14. Vaccination. | |

SECOND SUBJECT—PENMANSHIP AND COPYING.

Copy accurately the following:

The Civil Service Commission has classified all the places of employment in the service of the City of Chicago into Divisions according to the character of the work done. Each Division is subdivided into grades, based upon the amount of compensation received. Most of the employes of the Department of Health are included in Division A, the Medical Service. This Division comprises all positions, the duties of which require a knowledge of the profession of medicine or of some branch thereof.

THIRD SUBJECT—WRITING FROM DICTATION.

The applicant will write out the following passage which will be dictated to him by the examiner:

Few people realize the responsibility which rests upon an inspector in the Health Department of a great city. They do not appreciate the fact that a careless or lazy inspector may be the cause of ending the lives of thousands of innocent human beings. The City of Chicago has no place of employment in the entire list of positions, which requires more faithful, more persistent, or more intelligent work than is required in the Health Department.

FOURTH SUBJECT—GENERAL FEATURES OF GOVERNMENT, NATIONAL, STATE AND MUNICIPAL.

1. Name the capital of the United States.
2. What two bodies make the laws of the United States?
3. What body interprets the laws of the United States?
4. What two bodies make the laws of Illinois?
5. What is the title of the chief officer of the Health Department?
6. Who passes the ordinances under which Chicago is governed?
7. How many aldermen are there in Chicago?
8. How many wards are there in Chicago?
9. Whose duty is it by law to preside over the Common Council?
10. If the Mayor of Chicago should die, how would a mayor be chosen, pending an election?

FIFTH SUBJECT—ARITHMETIC.

N.B.—In solving problems the processes should be not merely indicated, but **all the figures** necessary in solving each problem should be **given in full**.

Give the work in full in the following problems :

1. Add the following figures :

675982
17683
4129
867107
24
9109
306
57632
—

2. Multiply 86946804 by 267.
3. Divide 64926 by 18.
4. How much is $\frac{3}{4}$ of $\frac{1}{2}$ of $\frac{3}{8}$ of $\frac{5}{12}$?
5. Multiply 628.5 by 3.2.
6. If 608 thermometers cost \$456, how much does one thermometer cost?

SIXTH SUBJECT—TECHNICAL.

1. What experience have you had in the dairy or milk business?
2. Name all the frauds known to be practiced by milk dealers.
3. In securing a sample of milk or cream for analysis, how would you proceed?
4. What precautions would you observe so as to be able to swear that the milk you delivered to the chemist for analysis was the same milk and in precisely the same condition as when taken from the milkman?
5. What are the requirements of the ordinance as to proportion of butter fat, of total solids, of watery fluid?
6. Beginning with the milking of the cows, what precautions should be observed to insure the delivery of pure milk to the kitchen of the consumer?

7. Are there any diseases of the cow which can be conveyed to the human body by the milk? If so, name them.
8. What would you do if refused or interfered with in taking a sample of milk or cream?
9. Describe the proper sanitary conditions (*a*) of a milk depot, (*b*) of a milk wagon, (*c*) of a milk deliverer, (*d*) of milk cans and other receptacles for holding and transferring milk.
10. Name the three common impurities found in milk.

QUESTIONS FOR FUMIGATORS.

(ORIGINAL ENTRANCE.)

Written Examination No. 113. Held Sept. 10, 1896.

(For First Subject see Examination No. 114, page 227; for Second Subject see Examination No. 112, page 228.)

THIRD SUBJECT—GOVERNMENT.

1. Name four departments of the City Government.
2. State your idea of the duties of a fumigator.
3. What will be the term of office of the next Mayor of Chicago if he serves out his full term?
4. Name the body which enacts local regulations concerning contagious diseases.
5. Of what two branches is the Congress of the United States composed?
6. Name the month when the Illinois State Legislature will next meet in regular session.
7. In what month will the next regular election for aldermen take place in Chicago?
8. Give the titles of four members of the present President's cabinet.
9. Name the senators now representing Illinois in the Senate of the United States.
10. Name the month when the next popular election for President of the United States will take place.

FOURTH SUBJECT—ARITHMETIC.

Give all the Work.

1. Add the following numbers:

518932
1035
93
89642
963207
8931
278398
43672

2. Multiply 79230648 by 658.
3. Divide 350436 by 58.
4. How much is $\frac{3}{8}$ of $\frac{5}{7}$ of $\frac{1}{16}$ of $\frac{1}{3}$?
6. Divide 395.9736 by 5.83.

FIFTH SUBJECT—TECHNICAL.

1. What is the relative value of fumigation by chlorine and sulphur? How are they generated?
2. What is the best method of disinfecting the woodwork and floor of an infected room?
3. How should a house be disinfected where there has been diphtheria?
4. How can heat be used as a disinfectant?
5. State after which of the following diseases should fumigation be used. Give reason for or against. Give method in full: (a) Typhoid fever. (b) Malarial fever. (c) Small-pox. (d) Measles.
6. Describe deodorization, disinfection, fumigation, and state their relative values.

QUESTIONS FOR MEAT INSPECTORS.

(ORIGINAL ENTRANCE.)

Written Examination No. 114. Held Sept. 10, 1896.

(For Second Subject see Examination No. 112, page 228; for Third and Fourth Subjects see Examination No. 113, page 226.)

FIRST SUBJECT—ORTHOGRAPHY.

- | | | |
|------------------|-----------------|-----------------|
| 1. Disinfectant. | 8. Appearance. | 15. Nuisance. |
| 2. Emergency. | 9. Malignant. | 16. Preventive. |
| 3. Community. | 10. Isolation. | 17. Sulphur. |
| 4. Ventilation. | 11. Subsequent. | 18. Penetrate. |
| 5. Essential. | 12. Irritation. | 19. Renewal. |
| 6. Competent. | 13. Accident. | 20. Premises. |
| 7. Drainage. | 14. Occurrence. | |

FIFTH SUBJECT—TECHNICAL.

1. How does pregnancy affect the value of an animal's meat for eating purposes?
2. What should be done with a herd of hogs in one of which hog cholera has developed? How is the disease recognized?
3. What are the evidences of tuberculosis in cattle?
4. What is trichinosis? What change does it cause in the animal as seen by the microscope and by the naked eye?
5. Describe fully the difference between farcy and glanders.
6. Name the diseases influencing the value as a food of (a) beef, (b) veal, (c) pork.

TENEMENT
QUESTIONS FOR MEDICAL INSPECTORS.

(ORIGINAL ENTRANCE.)

Written Examination No. 112. Held Sept. 10, 1896.

FIRST SUBJECT—ORTHOGRAPHY.

- | | | |
|-----------------|-------------------|----------------|
| 1. Quarantine. | 8. Exposure. | 15. Efficient. |
| 2. Sanitary. | 9. Recognize. | 16. Premises. |
| 3. Analysis. | 10. Disease. | 17. Municipal. |
| 4. Temperature. | 11. Measles. | 18. Hospital. |
| 5. Eruption. | 12. Epidemic. | 19. Insanity. |
| 6. Symptom. | 13. Commissioner. | 20. Capable. |
| 7. Diagnosis. | 14. Suppress. | |

SECOND SUBJECT—PENMANSHIP AND COPYING.

The following offices and places of employment shall not be included in the Classified Service:

“Officers who are elected by the people, or who are elected by the City Council pursuant to the City Charter, or whose appointment is subject to confirmation by the City Council, judges and clerks of election, members of any Board of Education, the superintendent and teachers of schools, heads of any principal department of the city, members of the Law Department, and one private secretary of the Mayor.”

The offices and places above named shall constitute the Unclassified Service.

THIRD SUBJECT—GOVERNMENT.

1. Name four classes of inspectors in the Health Department.
2. In what month will the next regular election for Mayor of Chicago take place?
3. State your idea of the duties of a tenement inspector.
4. Name the regular yearly salary of a tenement inspector.
5. For how long a term are aldermen regularly elected in Chicago
6. Give the name or title of the official who possesses the pardoning power in the State of Illinois.
7. Does the State or National Government enact tariff laws?
8. How many years constitute the full term of a United States Senator?
9. Who, by virtue of his office, is the Commander-in-Chief of the Army and Navy of the United States?
10. Name the date of the next Presidential election.

FOURTH SUBJECT—ARITHMETIC.

Give all the Work.

1. Add the following numbers:

364512
 89603
 7854
 920133
 21
 3649
 89087
 734891

2. Multiply 67893205 by 987.

3. Divide 249382 by 47.

4. How much is $\frac{3}{8}$ of $\frac{1}{2}$ of $\frac{2}{3}$ of $\frac{1}{4}$?

5. What do 51 lbs. of tea cost at 65 cents a lb.?

FIFTH SUBJECT—TECHNICAL.

1. Describe fully the duties of a tenement inspector if sent to abate the following nuisances:

- (a) Full privy vault.
 - (b) Cesspools in back yard of a house.
 - (c) Throwing of refuse material between two buildings.
- (Make a report to the chief inspector in each case.)

2. How often should a catch basin be cleaned which is connected with the plumbing of a flat building having four stories and containing forty families?

- (a) How should it be cleaned?
- (b) How often should the traps be cleaned?

3. Describe

- (a) a sanitary garbage box,
 - (b) a sanitary catch basin.
- (Give reasons in each case.)

4. A citizen complains to the Health Department that foul odors exist in the bath room; name the possible causes of these odors.

5. Name ten (10) sanitary defects that could be found in the plumbing of a tenement building.

6. Describe the function and proper location and size (a) of revents, (b) of catch basins.

QUESTIONS FOR PLUMBING INSPECTORS.

(ORIGINAL ENTRANCE.)

Written Examination No. 29. Held Nov. 7, 1895.

(For first five subjects see Examination No. 24, page 224.)

SIXTH SUBJECT—PRACTICAL TEST.

1. Why do you prefer the position of inspector of plumbing rather than to follow your trade?

2. What are your qualifications?

3. Are you a practical plumber?

4. What is your definition of a practical plumber?

5. Give the substance of four (4) ordinances regulating plumbing in Chicago.

6. What is meant by a job of sanitary plumbing?

7. What is the soil pipe, and where does it connect?

8. Should it run above roof? Give reasons.

9. How should connection be made at foot of soil pipe?

10. What is your observation as to the relation between sewer air or gas, and disease?

11. What is the back vent, and what purpose does it serve in the construction of plumbing work?

12. Describe three sanitary traps, describing the virtue of each.

13. Where should the back vent be connected?

14. Where does the waste water from kitchen sinks empty? Give reasons.

15. How often should this receptacle of waste water be cleaned, and why is it built?

16. If sent to a building to determine if plumbing and drainage is defective, how would you proceed? What test would you make and how apply test?

17. What is the ordinance relating to plumbing work being open in a new building?

18. What is syphonage of traps, its cause and effect?

19. How long have you worked at the trade?

20. How long for one employer?

21. How long apprenticeship did you serve, and with whom?

22. What is the usual scale marked on plans?

23. If water was flooding a building and no stop-cock could be found, what would you do?

24. If a column of water stands fifty feet high in a pipe, what pressure should it show on gauge at foot of column?

25. If you were sent to a house in which the family had been poisoned by lead from service pipes, what would you find requiring abatement?

26. What is the composition of the metal known as plumber's solder?

27. State what you would consider your duties if you were appointed a plumbing inspector.

QUESTIONS FOR SMOKE INSPECTORS.

(ORIGINAL ENTRANCE.)

Written Examination No. 30. Held Nov. 7, 1895.
(For first five subjects see Examination No. 24, page 224.)

SIXTH SUBJECT—TECHNICAL.

1. What special qualification have you for the position of smoke inspector?

2. (a) Give your definition of dense smoke.

(b) Why should it be prohibited?

3. What is the difference between bituminous and anthracite coal, and what are the chief constituents of the smoke from bituminous coal?

4. With the ordinary boiler-setting, can smoke be avoided without the use of so-called smoke consumers?

Give reasons in full.

5. What practical suggestion would you offer for the abatement of the smoke nuisance in Chicago tugs?

6. What would you consider defective conditions in a steam plant?

Give reasons.

7. What, if any, would be the detrimental influence upon the health of

an individual who is constantly inhaling a smoky atmosphere such as to-day pervades the down-town districts of Chicago?

8. Are you an engineer? How long have you followed the occupation? Have you ever sold or had a pecuniary interest in any smoke-consuming device?

9. Describe, giving reasons, all the methods for the prevention of dense smoke.

10. What would you consider your most prominent duty as smoke inspector under the city ordinances?

QUESTIONS FOR ASSISTANT CHEMISTS.

(ORIGINAL ENTRANCE.)

Written Examination No. 49. Held Feb. 12, 1896.

TECHNICAL QUESTIONS.

1. What experience have you had in the practice of analytical chemistry?

2. Give atomic weights as follows:

Hydrogen 1,

Sulphur 32,

Oxygen 16.

Describe the process of making a tenth normal solution of sulphuric acid.

3. How would you distinguish, chemically, artificial butter from pure butter?

4. Describe a practical process for the determination of nitrogen.

5. (This question given double value.) Indicate briefly tests for the following subjects:

Chloral

Morphine

Strychnine

Arsenic

Cocaine

Phenol

Quinine

Tartar emetic

Glycerine

Boric acid

6. What is a ptomaine? Name two of them.

7. Give the names and symbols of two chlorides of mercury? How would you distinguish between them?

8. Name three common adulterations of milk.

9. Interpret the following milk analyses:

| | Specific gravity. | Butter fat. | Solids not fat. |
|-----|-------------------|-------------|-----------------|
| (a) | 1.033 | 3.6 | 9.35 |
| (b) | 1.035 | 1.2 | 9.35 |
| (c) | 1.026 | 2.1 | 7.20 |

10. The following are sanitary analyses of Lake Michigan water:
(State in each case whether or not the water is fit for domestic use.)

| | Total solids. | Loss on ignition. | Free ammonia. | Albuminoid ammonia. | Chlorides. | Oxygen consumed. |
|-----|------------------|----------------------|------------------|------------------------|------------|---------------------|
| (a) | 14.10 | 4.60 | .001 | .016 | .70 | .400 |
| (b) | 14.10 | 5.62 | .006 | .016 | .70 | .230 |
| (c) | 15.50 | 5.60 | .045 | .038 | .80 | .173 |

(Determinations in parts per hundred thousand.)

11. Name the solutions necessary for a sanitary water analysis. Give names simply, not method of making up.

12. A sample of cream is found by analysis to contain 7.5 per cent. of butter fat and its specific gravity to be 1.044. This sample is adulterated. What adulteration would you suspect from the figures given above?

13. Give a chemical method for the determination of glucose in syrup.

QUESTIONS IN CHEMICAL ARITHMETIC.

(In answering the following questions give all figures and symbols used in calculations.)

1. The specific gravity of a liquid is 1.0335. Required the weight of 17.6 cubic centimeters of above liquid.

2. A bottle holds 2.545 grams of alcohol, 42.74 grams of mercury and 5.829 grams of sulphuric acid. Required the specific gravity of mercury and sulphuric acid, the density of alcohol being .8095.

3. Given atomic weights as follows: Ca = 40; S = 32; O = 16; H = 1; what is the molecular weight of gypsum? ($\text{Ca S O}_4 + 2 \text{ H}_2 \text{ O}$.)

4. 75 grams Fe S treated with sulphuric acid yield how many grams of ferrous sulphate (Fe S O_4)? and of hydrogen sulphide (H_2S)?

How many grams of sulphuric acid will be required?

5. What is the simplest symbol of a substance whose percentage composition is as follows:

Carbon 71.58, atomic weight 12;

Hydrogen 6.66, atomic weight 1;

Nitrogen 4.91, atomic weight 1;

Oxygen 16.85, atomic weight 16?

CIVIL ENGINEERING SERVICE.

QUESTIONS FOR ASSISTANT CIVIL ENGINEERS.

(ORIGINAL ENTRANCE.)

Written Examination No. 116. Held Sept. 15, 1896.

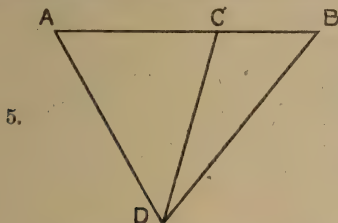
Give Work in Full in Each Case.

1. Suppose you were in a field with nothing but a tape line in the way of instruments, how would you lay out a rectangle and how would you prove that its angles were right angles?

2. Calculate the grade per foot between two points 296 feet apart with a difference of elevation of 2.37 feet.

3. A wooden beam has to support an equally distributed load of 200 lbs. per lin. ft., including weight of beam, and in addition a center load of 2,000 lbs. The span is 19 ft. What is the necessary width of an 18 in. beam for an extreme fibre strain of 850 lbs.?

4. Find dimensions of a riveted girder of medium steel, 21 in. high, to take the place of wooden beam in No. 3, with a factor of safety of 5.



A point C on the line connecting two inaccessible points A and B is accessible. How do you find the length AB when $CD=200$ ft., $ADC=33^\circ 15.6'$, $BDC=27^\circ 39.4'$, $ACD=76^\circ 44.0'$?

6. Solve the equations: $x^2 - y^2 = 98$.
 $x - y = 2$.

7. The area of a triangle is a ; the radius of the inscribed circle is r . What will be the sum of the three sides?

$$8. \frac{7a+2b}{a-b} + \frac{2a+5b}{a+b} - 6b \frac{2a+b}{a^2-b^2} = ?$$

9. Solve the equation: $28x^2 - 3x - 91 = 0$.

10. A point is connected with a reservoir by a pipe line 8 in. in diameter and 2,000 ft. long. What will be the discharge per minute at this point, being 35 ft. below the surface of the reservoir?

11. A canal discharging 400,000 cu. ft. of water per minute will give how many nominal horse power with a head of 22 ft.?

12. Describe the method of making a contour map and name the instruments necessary.

13. Write specification for rubble wall laid in lime mortar.

14. Describe an engineer's transit; give method of making various adjustments.

Describe an engineer's level; give method of making various adjustments.

15. How would you continue a line of survey striking an obstacle (for instance a house) which could not be seen through nor measured over conveniently?

16. What is the cubic contents of a cut 100 ft. long, 15 ft. deep at one end and 8 ft. deep at the other, and 16 ft. wide at bottom, with slopes of $1\frac{1}{2}$ horizontal to 1 vertical?

(Make sketches of such cut).

17. Give specification for medium steel.

18. Describe in detail the meaning of the terms "elastic limit" and "ultimate strength."

19. What is a Pratt truss?

20. Give specification for bridge timber.

QUESTIONS FOR RODMEN.

(ORIGINAL ENTRANCE.)

Written Examination No. 115. Held Sept. 15, 1896.

FIRST SUBJECT—ORTHOGRAPHY.

- | | | |
|-------------------|------------------|--------------------|
| 1. Dimension. | 8. Approximate. | 15. Coincide. |
| 2. Quadrangle. | 9. Equipment. | 16. Inaccessible. |
| 3. Accurate. | 10. Triangular. | 17. Parallel. |
| 4. Altitude. | 11. Equilateral. | 18. Irregularity. |
| 5. Adjustment. | 12. Suspension. | 19. Rectangular. |
| 6. Geometrical. | 13. Meridian. | 20. Topographical. |
| 7. Circumference. | 14. Variation. | |

SECOND SUBJECT—PENMANSHIP AND COPYING.

"When accurate observations on the declination of the needle in the same place are continued for several years, it is found that there is a continual and tolerably regular increase or decrease of the declination, continuing to proceed in the same direction for so long a period, that it may be called the Secular Variation of the declination.

The most ancient observations are those taken in Paris. In the year 1541 the needle pointed 7° east of north; in 1580 the declination had increased to $11\frac{1}{2}^{\circ}$ east, being its maximum; the needle then began to move westward, and in 1666 it had returned to the meridian; the declination then became west, and continued to increase till in 1814 it attained its maximum being $22^{\circ} 34'$ west of north."

THIRD SUBJECT—CLEARNESS AND CORRECTNESS OF STATEMENT.

State in a clear and concise manner your idea of what studies and what training are necessary in order that a rodman may perform his duties in the best and most practical manner.

FOURTH SUBJECT—MATHEMATICS.

I. Fill out the blanks with numbers:

- (1) $1^\circ = \dots\dots\dots$
- (2) $1' = \dots\dots\dots$
- (3) 1 right angle = $\dots\dots\dots^\circ$
- (4) Each angle of an equilateral triangle = $\dots\dots\dots^\circ$
- (5) Each acute angle of an isosceles right triangle = $\dots\dots\dots^\circ$
- (6) Each angle of a regular hexagon = $\dots\dots\dots^\circ$

II. Perform the following operations, expressing the result, in each case, in its simplest form:

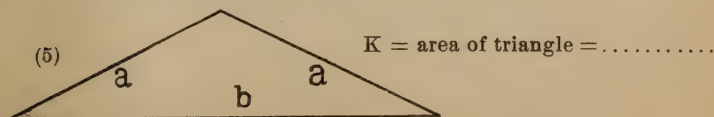
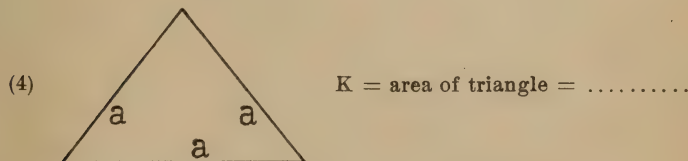
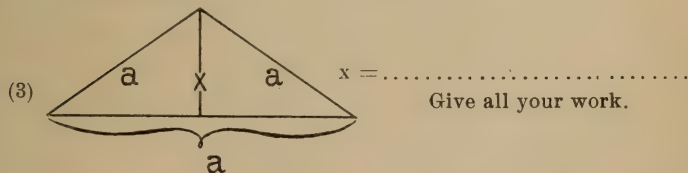
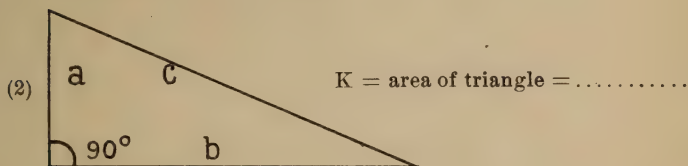
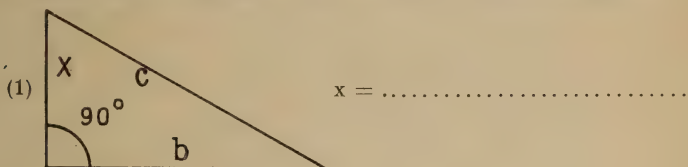
- (1) $\frac{1}{2} + \frac{3}{4} - \frac{3}{8} + \frac{2}{3} - \frac{5}{6}$.
- (2) $\frac{2}{3} \times \frac{1}{4} \times \frac{3}{8} \times \frac{2}{3} \times \frac{1}{2}$.

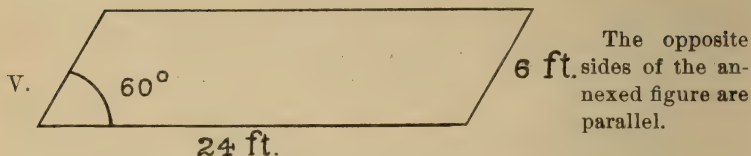
III. Fill out the blanks with numbers:

- (1) $\sqrt[4]{64} = \dots\dots\dots$
- (2) $\sqrt[3]{64} = \dots\dots\dots$
- (3) $5^4 = \dots\dots\dots$
- (4) $\sqrt[4]{1234} = \dots\dots\dots$

Give all your work, obtaining one decimal figure in your result.

IV. Express results in terms of some or all of the quantities given.





The opposite sides of the annexed figure are parallel.

Find the area, giving all your work.

VI. Express results in terms of some or all of the quantities given:

Let C denote the circumference of a circle;

let K denote the area of a circle;

let D denote the diameter of a circle; and

let R denote the radius of a circle.

(1) Express C in terms of D and some numerical value.

(2) Express K in terms of R and some numerical value.

VII. Let H denote the height, and R the radius of the base of a right, circular cylinder; work out the formula for the total exterior surface. Give all your work.

VIII. How many cubic yards will a masonry dam contain which is 513' long, 17' 5" high, 30" wide on top and 49" wide at bottom?

CLERICAL SERVICE.

QUESTIONS FOR CLERKS.

(ORIGINAL ENTRANCE.)

Written Examination No. 33. Held Nov. 9, 1895.

FIRST SUBJECT—ORTHOGRAPHY.

- | | | |
|-----------------|------------------|------------------|
| 1. Government. | 8. Century. | 15. Metropolis. |
| 2. Commercial. | 9. Permission. | 16. Injunction. |
| 3. Manufacture. | 10. Duplicate. | 17. Innocent. |
| 4. Merchandise. | 11. Competition. | 18. Sympathy. |
| 5. Industrious. | 12. Qualify. | 19. Separate. |
| 6. Franchise. | 13. Necessary. | 20. Calculation. |
| 7. Promptness. | 14. Connection. | |

SECOND SUBJECT—PENMANSHIP.

Make an exact copy of the following:

"The battle is not to the strong alone; it is to the vigilant, the active, the brave. Besides, we have no election. If we were base enough to desire it, it is now too late to retire from the contest. There is no retreat but in submission or slavery! Our chains are forged. Their clanking may be

heard on the plains of Boston! The war is inevitable; and, let it come. I repeat it, let it come!"

—Patrick Henry.

THIRD SUBJECT—WRITING FROM DICTATION.

"These instructions should be carefully read, as they answer most of the questions which applicants ask. For ordinary places, requiring no special qualifications, the number of applicants is usually excessive and the chances of appointment are small, except for those attaining high grades, while for places needing special qualifications the number of applicants is usually small and the chances of appointment generally much better.

"The applicant should regard the service of the city as he would any private employment, and reject the notion that public service is easier or more lucrative than like private service."

FOURTH SUBJECT—WRITING FROM ROUGH DRAFT.

Make a smooth copy, as it should be, of the following:

In character.
 Discussing the savage writers have
 been prone to indulge in prejudice
 and ^{passionate} exaggeration, instead of a true philosophy.
 they have not considered the peculiar circumstances
 in which the Indians have been placed, and
 the ^{peculiar} principals ^{under} which they
 have been educated. No man
 brings acts ^{more} rigidly from rule than
 the Indian. His whole behavior manner
 conduct is ^{regulated} according to ^{the} ~~top~~ ^{laws} which have
 been early implanted in his mind. The moral
 laws which ^{govern} him are but only few,
 but then he conforms to all. The white man
 abounds in ~~excess~~ laws ~~and~~ religion,
 and morals ^{and} manners ^{and} ~~violates~~ but
 how many ^{he} ~~breaks~~ ^{violate} ~~above~~

the candid temper to
 some general to maxims

not precisely

form

FIFTH SUBJECT—LETTER WRITING.

Write a letter applying to a commercial house for a position as clerk.

The competitor must avoid allusion to his political or religious opinions or affiliations. The letter must contain not less than 150 words, must be addressed as follows: "John Forrest & Co., Chicago, Ill.," and must be dated at Chicago. The examination number, *and not the name of the competitor*, must be used for a signature to the letter.

SIXTH SUBJECT—FUNDAMENTAL RULES OF ARITHMETIC.

N. B.—In solving problems the processes should be not merely indicated, but **all the figures** necessary in solving each problem should be **given in full**.

1. Add these across, placing the totals in the spaces provided, and find grand total:

Totals.

| | | | |
|--------------------------|-------|-------|-------|
| 2416 | 8961 | 8159 | ..... |
| 8932 | 6908 | 871 | ..... |
| 5678 | 1892 | 723 | ..... |
| 4109 | 906 | 4537 | ..... |
| 6327 | 8632 | 3702 | ..... |
| 4085 | 1128 | 2173 | ..... |
| 375 | 896 | 475 | ..... |
| 64783 | 2391 | 7025 | ..... |
| 93128 | 705 | 7822 | ..... |
| 9065 | 7514 | 83762 | ..... |
| 1797 | 5530 | 322 | ..... |
| 2468 | 183 | 63534 | ..... |
| 7681 | 1893 | 825 | ..... |
| 312 | 328 | 929 | ..... |
| 674 | 1307 | 712 | ..... |
| 8566 | 2119 | 5679 | ..... |
| 2158 | 60506 | 3127 | ..... |
| <i>Grand Total</i> | | | |

2. Divide 897654381 by 689.
3. Multiply 86901754 by 6873.
4. From 98062537106 subtract 17538976.

SEVENTH SUBJECT—ARITHMETIC: FRACTIONS AND PERCENTAGE.

N. B.—In solving problems the processes should be not merely indicated, but **all the figures** necessary in solving each problem should be **given in full**.

1. What is the product of $\frac{2}{5}$ of $\frac{1}{9}$ of $\frac{3}{4}$ of $\frac{7}{15}$ of $\frac{9}{14}$?
2. Divide 186503.91 by 81.35
3. What is the cost of $91\frac{3}{8}$ cords of wood at \$8.50 per cord?
4. A house costs \$8,000. It rents for \$42.00 a month. What per cent. does it pay on its cost, allowing \$86.00 annually for taxes and repairs?

EIGHTH SUBJECT—GENERAL FEATURES OF GOVERNMENT,
NATIONAL, STATE AND MUNICIPAL.

1. What is the title of the chief executive of the State Department of the United States, and how is he chosen?

2. What bodies make the laws of the United States?
3. What body makes final interpretation of the laws of the United States?
4. What is the title of the highest court in Illinois?
5. How are the members of the above court chosen?
6. If the Governor of Illinois should die, who would be governor, pending an election?
7. How many votes are necessary to pass an ordinance in the Common Council over a veto?
8. Who presides regularly over the City Council?
9. To how many members in the City Council is a ward entitled?

QUESTIONS FOR MESSENGERS.

(ORIGINAL ENTRANCE.)

Written Examination No. 9. Held Sept. 25, 1895.

FIRST SUBJECT—ORTHOGRAPHY.

- | | | |
|-------------|--------------|--------------|
| 1. Laugh. | 8. Deceive. | 15. Picture. |
| 2. Succeed. | 9. Likely. | 16. Reason. |
| 3. Believe. | 10. About. | 17. Title. |
| 4. Mention. | 11. Every. | 18. Truth. |
| 5. Claim. | 12. Friend. | 19. Cause. |
| 6. Sleeve. | 13. Gallant. | 20. Search. |
| 7. Please. | 14. Office. | |

SECOND SUBJECT—COPYING.

Experience proves that the apprentice foreshadows the workman, just as surely as the bend of the twig foretells the inclination of the tree. The upright, obedient, industrious lad will graduate a steady, skillful, and capable man, as unmistakably as the perverse, idling, careless boy will ripen into a lazy, dissolute fellow. The fact is, a boy is measurably the maker of his own destiny; and if he fails to acquire a master-knowledge of the trade to which he is put, it will mainly be because he did not at his outset determine to be a master-workman. Good morals and steady industry are indispensable.

THIRD SUBJECT—ARITHMETIC.

Express the following numbers by figures:

1. Twenty-six thousand twenty-six.
2. Four hundred fifty thousand thirty-nine.
3. Express 1895 in Roman notation.
4. Gave \$325 for a horse, \$125.50 for a carriage, \$75.35 for a harness, and \$20.62 for a robe. What was the cost of the whole?
5. If eight loads of coal weigh respectively 4699, 5477, 3763, 3994, 4769, 5047, 4925 and 5302, what is the entire weight?

6. From \$68.37 subtract \$24.25.

From one hundred and forty-one dollars subtract eighty-nine dollars and sixty-one cents.

7. A man bought a vest for six dollars, a coat for twelve dollars, three shirts for five dollars, and a pair of suspenders for seventy-five cents, and gave in payment three ten dollar bills. How much change should he receive?

8. Multiply 5378 by 69.

9. If a man has an income of \$720 a year, and his daily expenses average \$1.85, how much can he save in a year of 365 days?

10. Divide 8194326 by 9.

11. How many bales, each weighing 460 pounds, can be made of 74200 pounds of cotton?

12. A merchant bought equal quantities of four kinds of tea at 34 cents, 37 cents, 45 cents and 48 cents per pound. What was the average cost per pound?

13. If a young man receives a salary of \$15 per week, and pays \$5 for board and \$2.65 for other expenses, in how many weeks can he pay a debt of \$386?

FOURTH SUBJECT—MISCELLANEOUS.

1. What is the name of the Mayor of Chicago?

2. Where is the Chicago General Post Office?

3. Where is the Cook County Court House?

4. Express as fully as you can your conception of the duties of a messenger.

5. If sent from the City Hall to that part of the City of Chicago known as Pullman, what lines of cars could you use?

6. Where is the Chicago & Northwestern R. R. Depot in Chicago?

7. How many elevated railroads are now being operated in Chicago, and where are their terminal stations in the central part of the city?

QUESTIONS FOR STENOGRAPHERS.

(ORIGINAL ENTRANCE.)

Written Examination No. 119. Held Sept. 22, 1896.

FIRST SUBJECT—ORTHOGRAPHY.

1. Commission.

2. Assignment.

3. Apparatus.

4. Inspection.

5. Telephone.

6. Assessment.

7. Competition.

8. Resolution.

9. Opposite.

10. Substitute.

11. Sufficient.

12. Collection.

13. Executive.

14. Permanent.

15. Schedule.

16. Sympathy.

17. Franchise.

18. President.

19. Necessary.

20. Alabama.

SECOND SUBJECT—PENMANSHIP AND COPYING.

"Whereas, Under the provisions of an Act of the General Assembly of the State of Illinois, entitled 'An Act to Regulate the Civil Service of Cities,' approved and in force March 20, 1895, there was duly submitted to a vote of the electors of the City of Chicago at the general city election held April 2d, 1895, the proposition whether said city and its electors should adopt and become entitled to the benefits of said act, etc."

THIRD SUBJECT—LETTER WRITING.

Write a letter applying for a position as stenographer in a commercial house, stating your experience.

FOURTH SUBJECT—ARITHMETIC.

Give all your Work in Full.

1. Add these numbers *across*, placing the totals in the spaces provided, and find grand total.

| | | | |
|------|------|------|----------------|
| 1728 | 6917 | 8321 | <i>Totals.</i> |
| 512 | 1279 | 4732 | ..... |
| 1492 | 5642 | 9876 | ..... |
| 1643 | 897 | 5497 | ..... |
| 9875 | 789 | 392 | ..... |
| 215 | 1594 | 5619 | ..... |

Grand Total.....

2. From 760097
subtract 47369

3. Multiply 7963017 by 5373 and divide the product by 597.

4. Find the product of $\frac{3}{4}$ of $\frac{1}{7}$ of $\frac{5}{14}$ of $\frac{1}{15}$ of $\frac{2}{31}$ and reduce the result to its lowest terms.

5. A company having 7000 shares of stock declared a dividend of \$90,-160.83. How much is that per share?

FIFTH SUBJECT—ROUGH DRAFT.

Similar to that in Examination No. 33, page 237.

SIXTH SUBJECT—SHORTHAND DICTATION.

(Sample letter, 125 words, dictated to the class, taken down in shorthand and reproduced on the machine.)

September 1, 1896.

MR. JOHN A. ROBINSON, 708 New York Life Bldg.,
Chicago.

Dear Sir:—Referring to your favor of August 27th, concerning the condition of sidewalks at the corner of Forty-second Street and Indiana Avenue, I am in receipt of a report that an assessment was made for walks there in 1894, but that the owner filed his objections in the County Court, which were sustained by the Court. Consequently the Department could not compel the laying of the walk. We will, however, send notice to the owner to put in a cement walk, although you understand that the Department cannot compel the laying of the same without an ordinance having been passed, assessment made and confirmed by Court.

Yours very truly,

JOSEPH ADAMS,
Commissioner.

CHICAGO CIVIL SERVICE.

SEVENTH SUBJECT.

This exercise is intended to test the applicant's knowledge of the use and adjustment of the machine. You will make an accurate copy of the exercise given below:

REAL-ESTATE TRANSFERS.

The following real-estate transfers were filed for record, Saturday, September 5, 1896:

| | |
|--|----------|
| Forrestville av, 25 ft s of 45th st, w f, $23\frac{1}{4}$ x119.65, W. G. Clark et al to H. E. Peterson, Aug. 25..... | \$12,000 |
| Robey st, 58 ft n of Berenice av, w f, 25x125, A. Keinz to M. Barbara, Sept. 2..... | 2,000 |
| Lowe av, 285 ft s of 118 st, w f, 25 x $123\frac{3}{4}$, L. Kling to D. L. Dove, Dec. 31, 1895..... | 3,500 |
| Same ppty, D. L. Dove to Masonic Mutual S. and L. assn, Sept. 2... | 2,000 |
| Stewart av, 249 ft n of 66th st, w f, $49\frac{1}{2}$ x169.9, B. P. Murray to Ladies of Loretto, Sept. 4..... | 7,000 |
| Hamlin av, 233 ft s of Dickens av, e f, 25x125, A. Gent to W. Hubert, Aug. 1..... | 1,900 |
| Milwaukee av, 25 ft n w of Huron st, s w f, 75x100, and other ppty, G. A. Seaverns to A. Lenke, Aug. 18..... | 15,000 |
| Frankfort st, 154 ft e of Maplewood av, s f, 25x111, M. in C. to Lessing B. and L. assn, Aug. 18..... | 1,322 |

EIGHTH SUBJECT—DICTATION EXERCISE.

(To be taken directly on the machine.)

"During the past year, the department has rendered effective service in preventing disorder incident to the numerous strikes, lock-outs, etc., and I am pleased to report that, with few exceptions, the policy of the department in treating organized labor and capital with equal consideration, according to each the fullest protection of their rights, has been the means of avoiding a great deal of trouble that would otherwise have existed. The fact that we have been able to satisfy employers and employes alike is the best evidence that the department has directed its efforts in this direction strictly within the law."

NINTH SUBJECT—DICTATION EXERCISE.

(To be taken in shorthand and reproduced on machine.)

"Complying with the policy of the present administration, the department has been taken entirely out of politics. The conduct of the department at the fall election in this respect being such as to challenge the commendation even of the opposing political parties. Absolute order prevailed throughout the day, and protection was afforded to every citizen at the polls.

"Since the inauguration of the civil service law, this department has drawn upon the civil service commission for about 120 men; not a person has been employed by this department who was not regularly certified to the department by the civil service commission.

"The discipline of the department during the past year has been constantly improving, and the men, from what I have been able to learn, are satisfied with the mode of discipline in force in this department. While the discipline of offenders has been severe, the men who have sought to discharge their duty faithfully, have felt themselves secure in their positions. I have no doubt the merit system, which controls all promotions in this department, since the adoption of the civil service law, has acted as a spur to the men and officers of the department to more zealous work, and a more faithful attention to duty."

POLICE DEPARTMENT.

QUESTIONS FOR PATROLMEN.

(ORIGINAL ENTRANCE.)

Written Examination No. 126. Held Dec. 3, 1896.

FIRST SUBJECT—ORTHOGRAPHY.

- | | | |
|--------------|---------------|----------------|
| 1. Injure. | 8. Building. | 15. Rank. |
| 2. License. | 9. Cruel. | 16. Thief. |
| 3. Patrol. | 10. Battery. | 17. Conduct. |
| 4. Muscle. | 11. Ward. | 18. Promotion. |
| 5. Beat. | 12. Prisoner. | 19. Accept. |
| 6. Faithful. | 13. Examine. | 20. Reject. |
| 7. Loafer. | 14. County. | |

SECOND SUBJECT—PENMANSHIP.

Copy the following:

No branch of the city government more closely affects the welfare of Chicago than does its Police Department. Upon the efficiency of that department depends the safety of the lives and the property of its citizens.

THIRD SUBJECT—PLAIN COPYING.

Make an exact copy of the following:

No man can become a good patrolman unless he is obedient, honest, and brave. The duties of his position require strength and great powers of endurance. He should take good care of his health.

FOURTH SUBJECT—ARITHMETIC.

Give all your Work in Full.

1. Write the following in figures:
 - a. Forty-six thousand and seven.
 - b. Three thousand two hundred and seventy-three.

c. Five hundred and thirty-six.

d. Seven dollars and twenty-three cents.

2. Add the following figures:

36245

7204

31

358

9867

3. From 93784 subtract 4095.

4. Multiply 75832 by 72.

5. Divide 12558 by 14.

6. A patrolman receives a salary of \$1,000 a year; what is the total amount received by 79 patrolmen for 3 months?

FIFTH SUBJECT—GENERAL QUESTIONS.

1. What transportation lines would you take to reach most easily the Field Columbian Museum from the Auditorium Hotel?

2. By what transportation lines can the Union Stock Yards be reached easily from the Palmer House?

3. Locate the down-town terminus of the Metropolitan Elevated Railroad.

4. What transportation line would you take to reach easily the town of Pullman from the Masonic Temple?

5. Locate the new Criminal Court Building.

6. Locate the present Chicago Post Office.

7. Locate the Union Depot.

8. Locate the Central Station of the Illinois Central Railroad.

QUESTIONS FOR POLICE MATRONS.

(ORIGINAL ENTRANCE.)

Written Examination No. 20. Held Nov. 2, 1895.

FIRST SUBJECT—ORTHOGRAPHY.

- | | | |
|--------------|-------------|--------------|
| 1. Faithful. | 5. Bailiff. | 8. Thief. |
| 2. Patrol. | 6. Arrest. | 9. Officer. |
| 3. Sergeant. | 7. Club. | 10. Station. |
| 4. Confine. | | |

SECOND SUBJECT—PENMANSHIP AND COPYING.

Copy accurately the following:

DUTIES OF A MATRON.

One of the chief duties of a matron is to be ready, at all times when she is on duty, to care for a prisoner, or any person committed to her charge. She should not forget that many people, with the care of whom she is tem-

porarily entrusted, are not entirely responsible. The matron must be gentle but firm. She will never successfully control a willful prisoner unless she has absolute control over herself. She should be watchful, industrious and kind. She should be willing always to do what she can legitimately to aid the unfortunate.

THIRD SUBJECT—WRITING FROM DICTATION.

The applicant will write out the following passage which will be dictated by the examiner:

Both police drivers and police matrons should have neat habits. The work given to them is important. Careless habits or dress give every one who sees them a bad idea of the police service of Chicago.

FOURTH SUBJECT—ARITHMETIC.

Give the Work in Full in the Following Problems:

- | | | | |
|-----------------|-------|-------------|-------------|
| 1. Add together | 6754 | 2. From | 518964 |
| | 98 | subtract | 9765 |
| | 827 | | |
| | 72 | 3. Multiply | 6782 by 19. |
| | 318 | 4. Divide | 2856 by 42. |
| | 4211 | | |
| | 8 | | |
| | <hr/> | | |

FIFTH SUBJECT—MATRON'S DUTIES.

1. Have you ever worked in any public or private institutions? If so, where?
2. With what police department have you ever been connected, if any?
3. In either case, what was the cause of your losing your position? (Make no allusion whatever to politics.)
4. State fully your experience in the care of sick or suffering people.
5. Why do you seek the position of police matron?
6. Do you drink any kind of distilled or fermented liquors?
7. Do you use morphine, opium or tobacco in any form?
8. Are you truthful, honest and reliable?
9. What should be a matron's personal appearance in dress while on duty?
10. What do you consider the duties of a police matron?
11. Will a matron be better fitted for her position by becoming hardened by her experiences in dealing with the criminal classes?
12. To whom is a police matron responsible?
13. Is she responsible in any particular to her partner?
14. Is she responsible for the punishment, or for the care of her prisoners?
15. Why is it necessary to search prisoners?
16. What would you do in regard to any offer a prisoner might make you for assisting her to escape, to conceal anything found upon her person, or to secure her release?

17. Should a matron ever use violence or consent to have it used with a prisoner?
18. If you should see an officer using unnecessary force or violence with a prisoner, what would you do?
19. What would you do with money or valuables found on a prisoner?
20. How often should a matron visit her cells?
21. What would you do if a prisoner asked you to secure for her either a lawyer or a bondsman?
22. Should you treat a first offender in any way differently from an old offender?
23. What need is there, if any, of a matron's attending her prisoners to court?
24. Can you give any reason why it would be improper to leave the station at any time without a matron on duty?

QUESTIONS FOR DRIVERS.

(ORIGINAL ENTRANCE.)

Written Examination No. 110. Held Dec. 10, 1896.

FIRST SUBJECT—ORTHOGRAPHY.

- | | | |
|-------------|--------------|---------------|
| 1. Compel. | 8. Expel. | 15. Chief. |
| 2. Again. | 9. Tuesday. | 16. Rapid. |
| 3. Collar. | 10. Climb. | 17. Careless. |
| 4. Trouble. | 11. Harness. | 18. Halter. |
| 5. Alarm. | 12. Hurry. | 19. Service. |
| 6. Wound. | 13. Ankle. | 20. Careful. |
| 7. Attack. | 14. Tumble. | |

SECOND SUBJECT—PENMANSHIP.

Copy accurately the following:

None but sober, active men are fit for drivers in either the police or the fire service. They must have clear heads, be quick to act and faithful in all their duties.

THIRD SUBJECT—ARITHMETIC.

Give all your Work in Full.

- | | |
|-----------------------|---------------------------|
| 1. Add together: 5764 | 2. From 451986 take 7889. |
| 89 | 3. Multiply 8762 by 12. |
| 728 | 4. Divide 5712 by 84. |
| 27 | |
| 813 | |

FOURTH SUBJECT—PRACTICAL QUESTIONS.

1. What do you consider the proper feed, amount, etc., of a hard working horse?
2. What attention does a team require after a severe run, when they are heated and excited?
3. Describe some of the actions of a horse suffering from colic. In case a horse that you were driving was seized with colic, what would you do for him?
4. How does a horse act when suffering from blind staggers, and what would you suggest to do for him if he were so attacked while traveling on the road?
5. Name one common disease other than blind staggers and colic that may attack a horse suddenly. What should you do for him in the case you name?
6. If a horse became overheated how would you know it and what would you do for him?
7. Tell what care a horse's feet require.
8. State briefly what you know about the care of stables.
9. What care and attention does a harness require?
10. What care and attention does a wagon require?
11. State fully and explicitly all your experience in the care and management of horses. Mention especially your experience in handling rapidly moving teams on crowded streets.

ELECTRICAL SERVICE.

QUESTIONS FOR LINEMEN FOR AERIAL LINES.

(ORIGINAL ENTRANCE.)

Oral Examination No. 106. Held Sept. 10, 1896.

1. How long and with whom have you worked as lineman on aerial lines? Give name and location of each person, firm or corporation with whom you have served, also the branch of the service, such as telegraph, telephone, electric light, electric railway, fire alarm telegraph, etc., with length of time served with each.
2. If a No. 9 iron wire was stretched and lying on the cross arms of a line of cedar poles, 25 feet above ground, and you were required to climb the poles and tie in the wire, how many miles could you tie in each day of 10 hours, 40 poles to the mile?
3. How long will it take you to climb a 40-foot cedar pole, cut a gain and put on a ten pin cross arm?
4. Can you receive a message by the Morse telegraph system? If so, how many words can you receive per minute?

5. What do you understand by an ohm? By a volt? By an ampere?
6. What do you understand by resistance in an electric conductor?
7. What generally causes the resistance in electric circuits to increase after two or three years' service?
8. Connect a No. 9 iron wire.
9. Connect a No. 12 copper wire with McIntyre connector.

NOTE.—To qualify as a lineman for aerial lines it is absolutely essential that applicant be able to answer questions 1, 2 and 3 satisfactorily, and to do the work required in 8 and 9.

Questions 4, 5, 6 and 7 are not considered absolutely essential, but by answering them intelligently and satisfactorily (in addition to the essentials) applicant's percentage will be increased in proportion to the intelligence shown in answering 5, 6 and 7 and by his skill as a telegraph operator.

QUESTIONS FOR LINEMEN FOR UNDERGROUND LINES.

(ORIGINAL ENTRANCE.)

Oral Examination No. 107. Held Sept. 10, 1896.

1. How long and with whom have you worked as lineman on underground lines? Give name and location of each person, firm or corporation with whom you have served, also the branch of service, such as telegraph, telephone, electric light, electric railway, fire alarm telegraph, etc., with length of time served with each.
2. Are you skillful in jointing insulated conductors for underground service? If so, state what kind of insulated wires you have worked on, such as rubber covered, paper covered, fibre covered, etc., etc.
3. Can you wipe a plumber's joint on a lead covered cable? If so, state approximately how many joints you can wipe, using $1\frac{1}{4}$ inch sleeves, in a day of 10 hours.
4. What do you understand by resistance in an electric conductor?
5. What do you understand by insulation?
6. What do you understand by an ohm? By a volt? By an ampere?
7. Can you receive messages by the Morse telegraph system? If so, how many words can you receive per minute?
8. Prepare a rubber covered stranded arc light cable for connection. Splice the copper and state what would be necessary to complete the joint.
9. Prepare a No. 16 rubber covered twisted pair for connection. Connect the copper and state what would be necessary to complete the joint.

NOTE.—To qualify as a lineman for underground service it is absolutely essential that the applicant be able to answer satisfactorily questions 1 and 2, and to do the work required in 8 and 9.

Questions 3, 4, 5, 6 and 7 are not absolutely essential, but intelligent answers to 4, 5, and 6, and the ability to wipe plumbers' joints and receive and send telegraph messages will greatly increase applicant's percentage.

FIRE SERVICE.

QUESTIONS FOR DRIVERS.

(ORIGINAL ENTRANCE.)

Written Examination No. 111. Held Dec. 10, 1896.

(For First, Second, and Third Subjects see Examination No. 110, page 246.)

FOURTH SUBJECT—PRACTICAL QUESTIONS.

1. How would you care for horses when they are heated and excited from hard driving?
2. Name one common disease other than blind staggers that may attack a horse suddenly. What should you do for him in the case you name?
3. What care should be taken of a horse's feet?
4. What would be the first thing you would do for a horse on returning from a fire, so as to be ready for another alarm?
5. If you were a driver in the fire department, and a horse was taken with the blind staggers, what would you do?
6. What is the first thing you would do, if a driver, upon arriving at a fire?
7. When would you not feed and water a horse?
8. How often should a horse get soft feed?
9. What would you do for a horse taken with colic?
10. State fully and explicitly all your experience in the care and management of horses. Mention especially your experience in handling rapidly moving teams on crowded streets.

QUESTIONS FOR PIPEMEN AND TRUCKMEN.

(ORIGINAL ENTRANCE.)

Written Examination No. 44. Held Dec. 27, 1895.

FIRST SUBJECT—ORTHOGRAPHY.

- | | | |
|------------|---------------|------------|
| 1. Oath. | 8. Notice. | 15. Chief. |
| 2. Monday. | 9. Surface. | 16. Sharp. |
| 3. Horse. | 10. Doctor. | 17. Hook. |
| 4. Rule. | 11. Build. | 18. River. |
| 5. Works. | 12. Lead. | 19. Clock. |
| 6. Skill. | 13. Hour. | 20. Flame. |
| 7. August. | 14. Eighteen. | |

CHICAGO CIVIL SERVICE.

SECOND SUBJECT—PENMANSHIP.

Copy accurately the following:

"Each member of the Fire Department shall be furnished with a copy of the rules prescribed by the Fire Marshal for the government of the Department."

THIRD SUBJECT—WRITING FROM DICTATION.

The applicant will write the following passage which will be dictated to him by the examiner :

Since the cold weather has begun, the Fire Department of the City of Chicago has had to fight many severe fires, which threatened to destroy houses and stores. Brave men are needed to do this work.

FOURTH SUBJECT—ARITHMETIC.

Give the Work in Full in the Following Problems:

$$\begin{array}{r} 1. \text{ Add together } 5421 \\ 936 \\ 87 \\ \hline 213 \end{array}$$

$$3. \quad \text{Multiply } 423 \text{ by } 9.$$

$$4. \quad \text{Divide } 8112 \text{ by } 13.$$

$$\begin{array}{r} 2. \quad \text{From } 6579 \\ \text{subtract } 482 \\ \hline \end{array}$$

Give the work in full.

QUESTIONS FOR ASSISTANT ENGINEERS.

(ORIGINAL ENTRANCE.)

Written Examination No. 47. Held Dec. 27, 1895.

(For Second Subject see Examination No. 44, page 249.)

FIRST SUBJECT—ORTHOGRAPHY.

- | | | |
|-------------|--------------|--------------|
| 1. Coal. | 8. Crowd. | 15. Coil. |
| 2. Labor. | 9. Meal. | 16. October. |
| 3. Failure. | 10. Brick. | 17. Honesty. |
| 4. Beam. | 11. Chimney. | 18. Inspect. |
| 5. Whistle. | 12. Twenty. | 19. Clean. |
| 6. Stall. | 13. Shall. | 20. Escape. |
| 7. Report. | 14. Public. | |

THIRD SUBJECT—WRITING FROM DICTATION.

The applicant will write the following passage which will be dictated to him by the Examiner :

"The officer in command of the first engine company arriving at a fire, on the first alarm, will secure a hydrant and lead out the hose."

FOURTH SUBJECT—ARITHMETIC.

Give the Work in Full in the Following Problems:

- | | |
|---|------------------------|
| 1. Add together 7935 428 232 64 <hr style="width: 100px; margin-left: 0;"/> | 3. Multiply 2581 by 7. |
| 2. From 8596 subtract 467 <hr style="width: 100px; margin-left: 0;"/> | 4. Divide 8432 by 16. |

FIFTH SUBJECT—EXPERIENCE.

1. Are you a machinist?
2. Where did you learn your trade?
3. What kind of work did you perform in the shop?
4. Have you ever had charge of a boiler or engine? If so how long and where?
5. If you have had any experience, give your ideas of the care and management of a boiler or an engine.

MECHANICAL ENGINEERING.

QUESTIONS FOR MECHANICAL ENGINEERS.

(ORIGINAL ENTRANCE.)

Written Examination No. 127. Held Nov. 13, 1896.

FIRST SUBJECT—ORTHOGRAPHY.

- | | | |
|--|---|---|
| 1. Machine. 2. Cylinder. 3. Regulate. 4. Crank. 5. Condense. 6. Fuel. 7. Engine. | 8. Compound. 9. Suction. 10. Indicator. 11. Weight. 12. Repair. 13. Lever. 14. Shaft. | 15. Speed. 16. Iron. 17. Gauge. 18. Expand. 19. Diameter. 20. Ventilation. |
|--|---|---|

SECOND SUBJECT—PENMANSHIP.

“We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that

among these are Life, Liberty and the pursuit of Happiness."—*The Declaration of Independence*.

THIRD SUBJECT—ARITHMETIC.

1. Add the following numbers:

4677
9543
27859
3021
7606
39275
864239

2. From 7804031
subtract 930486

3. Multiply 9786
by 875

4. A man having \$5,237, gave \$1,625 for an engine, and \$1,345.50 for boilers, pumps and other appliances to fit an engine room. How much money had he left?

5. A quantity of goods cost \$1,248.65 and was sold for \$1,540. What was the gain?

6. A man paid \$6,000 for a house, one-half as much for the lot and \$1,575 for the furniture. What was the cost of the whole?

FOURTH SUBJECT—TECHNICAL QUESTIONS.

1. What are the duties of an engineer?
2. What should an engineer do before starting his engine?
3. What constitutes an engine room outfit?
4. What is meant by the term "cut-off" as applied to an engine?
5. Why is there a counter-bore on a steam cylinder?
6. State the meaning of "angular advance" of an eccentric.
7. What is used to regulate the speed of an engine?
8. Is it necessary to have an exhaust heater? Why?
9. What is back pressure?
10. Is it necessary to have clearance in a steam cylinder?
11. What is the effect of early exhaust closure on steam consumption?
12. How can you find the true dead center of an engine?
13. What are the principal causes of knocking and pounding?
14. What are the evils of tight piston (rings) packing?
15. What should be done if the cylinder becomes worn out of true?
16. What harm is done when boilers are not properly cleaned?
17. Suppose the safety valve stuck, what would be the cause, and how would you remedy the situation?
18. What is piston displacement?
19. How many pounds pressure per square inch are equal to one atmospheric pressure?
20. What is the net area of a piston on the piston rod side, if the piston is 24 inches in diameter and the piston rod 3 inches in diameter?

QUESTIONS FOR MECHANICAL ENGINEERS.

(PROMOTION TO GRADE 5.)

Written Examination No. 121. Held Oct. 6, 1896.

FIRST SUBJECT—PENMANSHIP.

“Emergencies are liable to arise unexpectedly in the operation of the steam boiler and demand the highest qualities of mind and character on the part of him who may be called upon to meet them. Self-possession and coolness, with full control of every faculty, will usually enable the attendant to successfully meet any form in which they may appear, with the single exception of an explosion of the boiler; for that case prevention is the only cure.”

SECOND SUBJECT—CLEAR AND CORRECT STATEMENT.

State, in a clear and concise manner, your idea of what studies and what training are necessary to fit a mechanical engineer to perform his duties in the best and most practical manner.

THIRD SUBJECT—ARITHMETIC.

Give all work in full.

1. Add the following numbers:

45020
360791
4928
386
9259215

3. Multiply
- $625\frac{2}{3}$
- by 294.

4. Divide 3.008016 by 33.76.

5. What is the area of a circle whose radius is 2 ft. 4 in.?

6. A tank measures (inside) 8 ft. long, 4 ft. wide and 3 ft. deep. How many gallons of water can it hold?

2. Subtract 90.207 from 723.1.

FOURTH SUBJECT—TECHNICAL.

1. State the meaning of the term “horse power.”

2. What would be the mean effective pressure with a boiler pressure of 80 pounds and cutting off at
- $\frac{1}{4}$
- of the stroke?

3. State how you would determine whether there was equal clearance at each end of the cylinder; and, if there is more clearance at one end than at the other, how would you regulate it?

4. How would you determine the proper amount of injection water which should be used in a condensing engine in order to obtain the best results?

5. Give a full explanation of what should be the position of the eccentric relative to the crank.

6. Suppose the crank pin commences to heat, and the engine cannot be stopped, what should you do?
7. State the difference between a jet condenser, a surface condenser and an injector condenser.
8. How would you find out if a crosshead is out of line and how would you adjust it?
9. Suppose connecting rod boxes were closed in (or nipping), what would be the result and what would you do in this case?
10. How would you calculate the heating surface—
 - (a) of a tubular boiler;
 - (b) of a water tube boiler?
11. What should be the proportion of grate area to the heating surface of a boiler?
12. State the difference between cross compound and tandem compound engines.
13. What is forced draught?
14. How should you find out the thickness of the shell in an old boiler?
15. State the best method of measuring the leakage in a pumping engine.
16. What precautions should be taken in laying a long suction pipe for a pump?
17. State the object of using balance-weights on cranks.
18. What is the net area of a piston 36 inches in diameter if the piston rod is $5\frac{1}{2}$ inches in diameter?
19. At what pressure will a safety valve blow off if the diameter of the valve is 3 inches; the weight, including lever, 50 pounds; and the proportion of the lever 16 to 2?
20. If the water is 80 feet high in the stand pipe, what will be the pressure per square inch on the mains?

INSPECTION SERVICE.

QUESTIONS FOR PAVING INSPECTORS.

(ORIGINAL ENTRANCE.)

Written Examination No. 102. Held July 29, 1896.

FIRST SUBJECT—ORTHOGRAPHY.

- | | | |
|-----------------|--------------------|----------------|
| 1. Preparation. | 8. Smooth. | 15. Approach. |
| 2. Pavement. | 9. Pebble. | 16. Curbing. |
| 3. Level. | 10. Block. | 17. Margin. |
| 4. Furnish. | 11. Uniform. | 18. Alley. |
| 5. Pocket. | 12. Boulevard. | 19. Rough. |
| 6. Compact. | 13. Specification. | 20. Dimension. |
| 7. Artificial. | 14. Method. | |

SECOND SUBJECT—PENMANSHIP.

"On the medium business streets—of which fair examples are found in Milwaukee Avenue, West Madison Street, Ogden and Archer Avenues—the material used should be granite block or vitrified brick. As to the latter, it may be said that its use in Chicago will be an innovation, but the material has been thoroughly tested in many of the smaller cities of the country and seems to have admirably answered the purpose to which it was devoted."

THIRD SUBJECT—PLAIN COPYING.

"The dimensions of the brick used shall be the same throughout the entire work in any particular case, and shall not be less than eight (8) inches nor more than nine (9) inches in length, four (4) inches in depth, and not less than two and three-eighths ($2\frac{3}{8}$) inches nor more than three (3) inches in thickness, with rounded edges with a radius of three-eighths ($\frac{3}{8}$) of an inch. Said brick shall be of the kind known as re-pressed brick, and shall be re-pressed to the extent that the maximum amount of material is forced into them. They shall be free from lime and other impurities; shall be as nearly uniform in every respect as possible; shall be burned so as to secure the maximum hardness; so annealed as to reach the ultimate degree of toughness, and thoroughly vitrified so as to make a homogeneous mass."

FOURTH SUBJECT—ARITHMETIC.

$$\begin{array}{r} 1. \text{ Add} \quad 645 \\ \quad 26081 \\ \quad 3419 \\ \quad 2745 \\ \hline \end{array}$$

$$\begin{array}{r} 2. \text{ From } 4196502 \\ \text{take } 1629379 \end{array}$$

$$3. \text{ Multiply } 70943 \text{ by } 865.$$

$$4. \text{ Divide } 821705 \text{ by } 495.$$

Give work in full and reduce remainder to lowest terms.

5. How many cubic inches in 6 cubic feet?

6. How many cubic feet in a block of stone 9 ft. long, 8 ft. wide and 6 ft. high?

(Give work in full.)

7. What is the area in square feet of a field 12 rods long and 40 yards wide? (Give work in full.)

FIFTH SUBJECT—TECHNICAL QUESTIONS.

1. Describe, in a general way, the preparation of a new street to receive a pavement, including the proper back-filling of all water, sewer and other trenches, removal of soft earth, etc.

2. State fully what should be done to prepare a street for repaving.

3. Describe briefly and in your own way the proper construction, on a street prepared as above, of each of the following kinds of pavement, including the foundation, proper material to be used, method of laying, etc.; also state the most common violations of the specifications that may be attempted in each kind of pavement:

(a) Cedar block (on a wood foundation).

(b) Granite block.

(c) Macadam.

(d) Brick.

(e) Asphalt.

QUESTIONS FOR WARD AND STREET INSPECTORS.

(ORIGINAL ENTRANCE.)

Written Examination No. 77. Held April 25, 1896.

FIRST SUBJECT—ORTHOGRAPHY.

- | | | |
|-------------------|------------------|---------------------|
| 1. Removal. | 8. Receptacle. | 15. Extension. |
| 2. Cleanliness. | 9. Sprinkle. | 16. Engineering. |
| 3. Division. | 10. Necessitate. | 17. Length. |
| 4. Investigation. | 11. Saturday. | 18. Elbow. |
| 5. Garbage. | 12. District. | 19. Frontage. |
| 6. Scavenger. | 13. Valve. | 20. Superintendent. |
| 7. Sweep. | 14. Crossing. | |

SECOND SUBJECT—PENMANSHIP.

In Chicago there are fifty-five public swing bridges, and thirty-eight systems of viaducts, a larger number than can be found within the limits of any other city in the world. The city employs fifty-five bridge tenders and one hundred and twenty-five assistants to operate the bridges, and also a large force of workmen who are constantly engaged in making repairs upon bridges and viaducts.

THIRD SUBJECT—CLEARNESS AND CORRECTNESS OF STATEMENT.

Make a written statement, about 100 words long, embodying your idea of the duties of the position for which you are applying.

FOURTH SUBJECT—ARITHMETIC.

Give work in full.

- | | | |
|--|---|--|
| 1. Add | 34728 9604 1597 10062 379 2937 39625 95342 | 6. How would you find the capacity of a wagon box in cubic yards and feet? |
| 2. Divide 243386 by 69. Reduce remainder to lowest terms and place in quotient. | | 7. How would you ascertain the number of loads it would take to fill a street or alley when the width, depth and length of same are given? |
| 3. Multiply 3907.5 by .42 | | 8. How many square yards in a street half a mile long and 38 ft. wide, including intersections? |
| 4. How many cubic feet in a cubic yard? | | 9. What fraction of a mile is 4400 ft.? |
| 5. How many linear feet in a linear mile? | | 10. How many lengths of 16 ft. pipe are needed per mile (making no allowance for joints)? |

FIFTH SUBJECT—TECHNICAL QUESTIONS.

1. What is a blind alley?
2. What is a private alley?
3. What is a garbage contractor required to remove?
4. What is a householder required to remove?
5. In case a householder had no garbage- or ash-box, what course would you pursue?
6. If parties owning or running a stable put their manure in the street or alley, what course would you pursue?
7. If you should find garbage or ashes thrown in the alleys, what course would you pursue?
8. What would you do in case you found any dead animals in your district?
9. If you found a garbage-box half full of plaster, what would you do?
10. Before beginning actual operations of street sweeping machines, what is it necessary to do?
11. How would you clean a blocked street?
12. How would you clean a macadamized street?
13. What does the contract specification provide regarding the removal of street sweepings?
14. If your contractor does not fulfill contract, what would you do?
15. If his wagons are broken and covers poor, what would you do?
16. If the contractor begged off from doing his work on a plea of drunken driver, sick horse, etc., what then?
17. If a boarding house or restaurant offered you pay to take their garbage, what would you do?
18. If the contractor offered to keep a horse for you to assist you in your work, what would you say?

QUESTIONS FOR MASON INSPECTORS.

(ORIGINAL ENTRANCE.)

Written Examination No. 103. Held July 30, 1896.

(For Second Subject see Examination No. 102, page 254.)

FIRST SUBJECT—ORTHOGRAPHY.

- | | | |
|-----------------|------------------|------------------|
| 1. Bridge. | 8. Construction. | 15. Timber. |
| 2. Mechanic. | 9. Material. | 16. Superintend. |
| 3. Special. | 10. Defective. | 17. Discipline. |
| 4. Excavating. | 11. Prepare. | 18. Cement. |
| 5. Area. | 12. Business. | 19. Mortar. |
| 6. Square. | 13. Carefully. | 20. Integrity. |
| 7. Improvement. | 14. Structure. | |

THIRD SUBJECT—PLAIN COPYING.

CURB WALLS.

The curb walls shall be three feet (3 ft.) three inches (3 in.) thick at the bottom, eighteen inches (18 in.) thick at the top and nine feet (9 ft.) in height, unless other dimensions are ordered in writing by the Commissioner of Public Works.

The masonry shall be uncoursed rubble and shall consist of the best quality of stone, laid in lime mortar, the stone to be of good size and have good smooth beds.

The stones to be laid on their quarry beds in flush beds of mortar, and driven down to close joints.

Fully one-fourth ($\frac{1}{4}$) of the stone shall be headers, so laid as to break joints and bond the wall well together.

FOURTH SUBJECT—ARITHMETIC.

Give all work in full.

| | |
|--------|--------------|
| 1. Add | 7395 |
| | 1164 |
| | 5024 |
| | <u>73219</u> |

| | |
|-------------|------------|
| 3. Multiply | 83409 |
| by | <u>576</u> |

| | |
|---------|----------------|
| 2. From | 5743602 |
| take | <u>3574716</u> |

4. Divide 689356 by 472.
Reduce remainder to lowest terms.

- How many cubic yards in 63 cubic feet?
- The foundation of a monument is 11 yards square and 8 feet high; how many cubic yards does it contain?
- How many yards and feet in 175 rods?

FIFTH SUBJECT—TECHNICAL QUESTIONS.

1. You will state what you would consider sufficient causes for rejecting the following material for use in the public works of the City of Chicago:

- Cement.
- Lime.
- Sand.
- Stone.
- Brick.

- Describe the method of building a 24-inch brick wall.
- How would you mix cement mortar for laying a brick wall?
- Describe three classes of masonry in common use in the City of Chicago.

1st Class. Pier masonry.

2nd Class. Abutment masonry.

3rd Class. Rubble masonry uncoursed.

5. On what grounds would you reject stone in each of the classes referred to in Question 4?

6. How would you prepare an earth foundation to receive masonry?

7. State fully the experience you have had to qualify you to be a mason inspector.

JANITOR SERVICE.

QUESTIONS FOR ELEVATOR MEN.

(ORIGINAL ENTRANCE.)

Written Examination No. 54. Held April 3, 1896.

1. State your previous experience as an elevator conductor.
2. What is the first thing you do in the morning before starting to carry passengers?
3. When carrying passengers, what do you do to let them off?
4. What do you do when passengers are out and in, as the case may be, before starting the car?
5. In case you cannot get up to let people off at landings, what would you do then?
6. In case the dogs or safeties catch in descending, what would you do?
7. In case your car does not stop at landings when safeties catch, what would you do?
8. What would be the limit of number of passengers you would take going up if the elevator capacity were 2,000 pounds?
9. Would you, in coming down, open up your operating device as much with twelve passengers as you would with one?
10. How would you open your operating valve in going up with six passengers?

QUESTIONS FOR JANITORS.

(ORIGINAL ENTRANCE.)

Oral Examination No. 52. Held March 21, 1896.

1. Where did you work last? How long?
2. Did you leave your last position through any shortcoming of your own?
3. Where did you work before your last place? How long? Did you leave it through any fault of your own?
4. Can you read and write?
5. Have you ever worked for the city? Did you leave the city employ through any fault or delinquency of your own?
6. Tell briefly the different kinds of work that you have done.
7. What do you consider to be the duties of a janitor?
8. Have you ever been discharged for cause from any position aside from those you have mentioned?
9. Have you ever had any experience in directing or overseeing the work of others?
10. What do you consider the most important qualification of a janitor?

LIBRARY SERVICE.

(ORIGINAL ENTRANCE.)

Written Examination No. 34. Held March 17, 1896.

(For the first four subjects see the First, Second, Third and Sixth Subjects of Examination No. 33, page 236.)

FIFTH SUBJECT—TECHNICAL QUESTIONS.

Answer questions 1, 2, 3 and 4, and any six of the others which are numbered from 5 to 16, but NO MORE. If more than six of these other questions are answered, only the first six of these answers will be considered. Division of groups is not allowed. Each complete answer will receive ten credits.

QUESTION 1.

Mention one work of each of the following authors:

- | | |
|-----------------------------|----------------------------|
| 1. Thomas Carlyle. | 6. Bret Harte. |
| 2. Alexander Pope. | 7. Sir Walter Scott. |
| 3. Georg Ebers. | 8. John Ruskin. |
| 4. Francis Marion Crawford. | 9. Count Lyoff N. Tolstoi. |
| 5. Charles Reade. | 10. Ernest Renan. |

QUESTION 2.

Give the authors of the following works:

- | | |
|-------------------------------------|--------------------------------|
| 1. Autocrat of the Breakfast Table. | 6. Rise of the Dutch Republic. |
| 2. Around the World in Eighty Days. | 7. Lucile. |
| 3. Canterbury Tales. | 8. Charles O'Malley. |
| 4. Henry Esmond. | 9. Tom Brown's Schooldays. |
| 5. Faerie Queen. | 10. Nathan the Wise. |

QUESTION 3.

Locate, by country and century, and characterize the following persons:

e. g. Milton. Answer: English Poet, 17th Century.

- | | |
|----------------------|-----------------------|
| 1. Alfred the Great. | 6. Oliver Cromwell. |
| 2. Petrarch. | 7. Benjamin Franklin. |
| 3. Gutenberg. | 8. Adam Smith. |
| 4. Michael Angelo. | 9. Rousseau. |
| 5. Molière. | 10. Immanuel Kant. |

QUESTION 4.

Mention authors and titles of works in which the following appear as characters: *e. g. Ophelia. Answer: Shakespeare, Hamlet.*

- | | |
|----------------------|-------------------|
| 1. Achilles. | 6. Rebecca. |
| 2. Sancho Panza. | 7. Macduff. |
| 3. Mark Tapley. | 8. John Alden. |
| 4. Friday. | 9. Mrs. Malaprop. |
| 5. Arthur Pendennis. | 10. Topsy. |

QUESTION 5.

Characterize briefly the following periodicals:

- | | |
|---------------------------|---------------------------|
| 1. North American Review. | 6. Library Journal. |
| 2. Century Magazine. | 7. Nineteenth Century. |
| 3. The Dial. | 8. Von Fels zum Meer. |
| 4. Littell's Living Age. | 9. Revue des Deux Mondes. |
| 5. McClure's Magazine. | 10. Review of Reviews. |

QUESTION 6.

Name five living American writers of fiction and mention two works of each.

QUESTION 7.

Name three standard English or American encyclopedias and two standard dictionaries of the English language.

QUESTION 8.

Of what persons are the following pseudonyms:

- | | |
|-------------------|--------------------|
| 1. Mark Twain. | 6. Marion Harland. |
| 2. George Eliot. | 7. Poor Richard. |
| 3. Boz. | 8. Ik Marvel. |
| 4. H. H. | 9. George Sand. |
| 5. Owen Meredith. | 10. Jean Paul. |

QUESTION 9.

Give the names of five French authors of the present century, and mention one work of each.

QUESTION 10.

Name five English or American humorists of the present century and mention one work of each.

QUESTION 11.

Give the name of one standard historian of each of the following countries or periods:

- | | |
|------------------|-----------------------------|
| 1. Greece. | 6. The Crimean War. |
| 2. Rome. | 7. Germany. |
| 3. The Crusades. | 8. Mexico. |
| 4. France. | 9. The American Revolution. |
| 5. Spain. | 10. Egypt. |

QUESTION 12.

Name five English poets of the Victorian era.

QUESTION 13.

Name ten leading daily newspapers of the United States, outside of Chicago, and mention the city where each is published.

QUESTION 14.

On what subject are the following named persons recognized authorities:

1. Herbert Spencer. 2. Geike. 3. Audubon. 4. Guizot. 5. Faraday. 6. Von Holst. 7. Henry George. 8. Pestalozzi. 9. Herschel. 10. Fergusson.

QUESTION 15.

Name ten dramatic masterpieces of the world's literature, five tragedies and five comedies.

QUESTION 16.

Name three great epic poems.

MISCELLANEOUS SERVICE.

QUESTIONS FOR STREET DISTRICT FOREMEN.

(ORIGINAL ENTRANCE.)

Written Examination No. 93. Held June 20, 1896.

FIRST SUBJECT—ORTHOGRAPHY.

- | | | |
|--------------|---------------------|-------------------|
| 1. Concrete. | 8. Pavement. | 15. Construction. |
| 2. Cement. | 9. Laborer. | 16. Granite. |
| 3. Mortar. | 10. Superintendent. | 17. Curbstone. |
| 4. Asphalt. | 11. Cedar. | 18. Surface. |
| 5. Macadam. | 12. Hemlock. | 19. Masonry. |
| 6. Sidewalk. | 13. Explosion. | 20. Building. |
| 7. Repair. | 14. Material. | |

SECOND SUBJECT—PENMANSHIP.

Make an exact copy of the following :

One of the most important qualifications of a foreman is personal integrity. Few positions in the entire service of the City offer a better opportunity for a capable and honest man to render to the City full value for the pay that he receives from it.

THIRD SUBJECT—ARITHMETIC.

- Write in figures the number expressed by the following words :
One thousand two hundred and thirty-five.
Write in words the number expressed by the following figures: 8,507.

2. Add the following column of figures :

3,165
1,943
2,797
2,586
1,005
3,989

3. Suppose you have under you
48 men at \$1.87 per day. What will
be the amount of the pay roll for a
week of six working days ?

Give the work in full.

4. If you have a pile of 37,250 bricks and take away 19,975 of them,
how many will be left ? Give the work in full.

5. When stone is worth 92 cents a yard, how many yards can be bought
for \$69 ? Give the work in full.

6. What would be the cost of paving a piece of street 30 feet wide by
60 feet long at the rate of \$1.37½ per square yard ? Give the work in full.

FOURTH SUBJECT—GOVERNMENT.

1. State the length of the full term of the President of the United States.
2. Name and locate the capital of the United States.
3. Name the title of the highest court of the United States.
4. Of what two bodies is Congress composed ?
5. Name the length of a full term of a United States Senator.
6. To how many senators is each state entitled ?
7. Name the full term of the Governor of Illinois.
8. To how many aldermen is a ward in Chicago entitled ?
9. How many wards are there in Chicago ?
10. How many Civil Service Commissioners are there, and how are they appointed ?

FIFTH SUBJECT—PRACTICAL DUTIES.

1. State what previous experience you have had that, in your judgment, especially qualifies you for the position of street foreman.

2. State, in detail, your ideas of the duties of a foreman of a street district.

Suppose stringers have been well laid on level ground, and suppose 16-foot hemlock planks are to be used; how many feet of sidewalk, 8 feet wide, should a competent man lay in a day of 8 hours ?

4. Suppose a foundation prepared to receive them, how many 5-inch cedar blocks should a competent man lay in 3 days of 8 hours each ? Take no account of ramming or filling in.

5. State what you know of the chief defects to be looked for in the following kinds of material used in repairing streets and sidewalks :

(a) Lumber.

(b) Brick.

(c) Gravel.

(d) Paving blocks.

6. How would you repair a macadam street ?

7. What class of lumber would you use in constructing a plank sidewalk ?

8. How would you repair a cedar block pavement ?

9. How would you keep an unimproved street in repair ?

10. State, in detail, the different kinds of book which you think a foreman should keep, and the purpose of each.

LABOR SERVICE.

QUESTIONS FOR OILERS.

(ORIGINAL ENTRANCE.)

Oral Examination No. 98. Held July 27, 1896.

1. What would be your first duty as oiler when you went on watch at one of the city pumping-engine stations ?
2. Have you had any previous experience as an oiler with large power or pumping engines ?
3. How do you know that a bearing is getting sufficient oil or grease ?
4. How do you know that a cylinder lubricator is working rightly ?
5. Name some causes which keep cylinder lubricators from working properly. How should these causes be removed ?
6. If a bearing is too hot, what is the best method of cooling it off while the engine is running ?
7. If any bolts, nuts or set screws be found loose, what should the oiler do ?
8. What causes bearings and pins to run warm or hot ?
9. If lubricated properly, should they do so ?
10. Which is better, a cleaned or a soiled piece of waste to wipe around crank pins while engine is running ?
11. What is your duty while on watch ?
12. What is your last duty previous to being relieved ?
13. What parts of an engine require the most care ?
14. Name the different kinds of lubricants used on large engines.
15. Do you know anything about packing stuffing boxes ?
16. Describe the manner of packing stuffing boxes.

QUESTIONS FOR FIREMEN—(MURPHY FURNACE).

(ORIGINAL ENTRANCE.)

Oral Examination No. 118. Held Sept. 10, 1896.

1. Are you familiar with the Murphy furnace, and what is the general arrangement of this furnace ?
2. What size coal is to be used ?
3. How may large lump coal be used in the furnace ?
4. How is coal fed into the fire ?
5. Suppose the automatic engine should break down, in what manner would you put coal on the fire and how often ?

6. How do you clean the fire in a Murphy furnace ?
7. If there should be a bare spot on the bar, what effect would it have on the furnace ?
8. How would you take care of a Murphy furnace should the engine shut down for one-half or three-quarters of an hour, or in case of a stop of the use of steam ?
9. Should the magazine be kept full of coal ?
10. What effect would it have on the coal if the magazine should not be kept full ?
11. Suppose the automatic engine should stop and coal in magazine should take fire and a great quantity of it should coke, what is likely to occur on starting the automatic engine ?
12. How would you manage your fire and magazine for closing down for the night.
13. If the connection from magazine to driving bar should break, what effect would it have on the magazine ?
14. How could the furnace be run with the connection broken ?
15. If the air-ducts to the combustion chamber should become choked, what effect would it have on the furnace ?
16. How do you place the registers for admitting hot air over coking coal ?
17. On shutting down a boiler, how do you clean the Murphy furnace ?

QUESTIONS FOR FIREMEN.

(Bituminous and Anthracite Coal, Common Grate Furnace.)

(ORIGINAL ENTRANCE.)

Oral Examination No. 109. Held Sept. 10, 1896.

1. What has been your experience as a fireman with bituminous, anthracite and oil fuel ?
2. What are the ordinary tools which a fireman uses ?
3. What would be your first duty when going on watch as a fireman ?
4. How should clinkers be removed, or a soft coal fire be cleaned ?
5. How should a hard coal fire be cleaned ?
6. Have you had any experience in blowing down boilers or the use of surface-blows ?
7. How should a falling grate-bar be replaced in a furnace with a heavy fire ?
8. How should a fire be banked to last over night ?
9. What experience have you had in feeding boilers with a pump, insiprator or injector ?
10. What would you do if the boiler foamed ?
11. Should the water become dangerously low, what should be done ?
12. Suppose you had a very heavy fire, and that the engine should suddenly shut down for temporary repairs, what should be done with the fire to prevent sudden and continuous blowing of the safety valve ?

13. How would you manage the fire so as to make the least smoke with soft coal?

14. What is *your* method of firing—how much coal do you shovel on at one time, and how often; also about how many inches thick do you carry a soft or a hard coal fire?

15. What is a check valve and where is it placed?

16. In cleaning fires, how would you carry the water in the boiler that you are cleaning?

17. If you are ordered to start a fire, how soon would you generate steam?

18. The pump or injector is apparently working, but the water in boiler is constantly getting lower, what would you do?

19. How often should the tubes be cleaned?

QUESTIONS FOR CARPENTERS AND CABINET MAKERS.

(ORIGINAL ENTRANCE.)

Oral Examinations Nos. 61 and 62. Held April 3, 1896.

1. What is your trade?
2. From whom and where did you learn it?
3. Did you serve a full apprenticeship, and how long?
4. Name your last three employers and state how long you worked for each.
5. What tools do you consider necessary for ordinary work on a building?
6. Give an idea how the square can be applied to getting the lengths and cuts.
7. Show with your square how to mark a mitre or an octagon cut.
8. What is the most effective way to test a straight edge?
9. Name the most lasting soft wood for a fence-post.

QUESTIONS FOR PAINTERS.

(ORIGINAL ENTRANCE.)

Oral Examination No. 67. Held April 8, 1896.

1. What is your trade? How do you know yourself to be a painter?
2. From whom and where did you learn your trade?
3. Did you serve a full apprenticeship, and how long?
4. Name your last three employers and state how long you worked for each.
5. Name the tools which a painter ordinarily uses.
6. Can you bind a brush?

7. When you quit work, how would you leave a new set of brushes the first day they are put in oil color?
8. How would you make hard putty?
9. Would you mix oil colors for outside the same as you would for inside work?
10. In what coat do you need the most oil—in the first or second?
11. How do you hold a pound brush when painting?
12. How would you prepare hard wood, stained by water, to bring it back to its natural color before finishing in varnish?

QUESTIONS FOR PLUMBERS AND GAS FITTERS.

(ORIGINAL ENTRANCE.)

Oral Examination No. 69. Held April 8, 1896.

1. How long have you been at the plumbing trade?
2. Where did you serve your time?
3. For whom did you work while serving your time?
4. What is the name of your last employer?
5. Name the jointing and calking tools?
6. Does the city prescribe the kind of solder joint to be made?
7. Name it, or what is it known as?
8. How is it made?
9. Of what is solder composed?
10. Name its compound.
11. Does the city regulate the kind of water service pipe to be used from street mains into buildings?
12. Is it of lead or iron?
13. Of what grade is it?
14. What is the weight of 1-inch strong lead pipe per lineal foot?
15. Of 2-inch lead waste pipe?
16. What is the average water pressure at grade in the city?
17. What is the weight of a gallon of water, U. S. standard?
18. What is the least diameter of soil pipe permitted by the Health Department?
19. What tests are required by the Health Department in plumbing inspection?
20. What is the most economical faucet to be used by the city?
21. In what respect does the Health Department regulate plumbing?
22. In what way is this done?
23. What is the purpose of a re-vent pipe?
24. What is syphonage?
25. How would you prevent it?
26. What is a re-vent pipe?
27. What is a vent pipe?
28. Why enlarge it at the roof? How high above the roof?

29. What is capillary attraction?
 30. How would you prevent it?
 31. What would be the effect of attraction?
 32. Which is the heavier, hot or cold water?
 33. Why is one heavier than the other?
 34. Which system will wear the better, one with hot and cold water, or one with hot or cold water alone?
 35. What is a pump?
 36. Name the jointing tools and kit of tools the plumbers use in their work.
 37. In case you were employed to examine a house to find sewer gas how would you go about it?
 38. At what grade per lineal foot towards the street sewer would you lay a 6-inch iron sewer pipe underground? 4-in.? 3-in.? Where would you start to get your grade?
-

QUESTIONS FOR MASONS.

(ORIGINAL ENTRANCE.)

Oral Examination No. 66. Held April 8, 1896.

1. What is your trade?
2. From whom and where did you learn it?
3. Did you serve a full apprenticeship, and how long?
4. Name your last three employers, and state how long you worked for each.
5. Name the tools which a mason ordinarily uses.
6. How would you place headers in a 20-inch wall?
7. How would you put headers in a 16-inch square pier?
8. Should brick be wet or dry when laid?
9. Is it customary where a wall is built for another piece to be joined to it, to raise a block joint or tooth out?
10. What is the Flemish bond?
11. What is rubble work?
12. In laying stone, what bed should be used?
13. How would you place headers in a stone wall?

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